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A Check List of Plant Rusts in Canada

by

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FOREWORD

This check list of the Plant Rusts in Canada has been prepared from records published up to 1952.

Many of the rusts have been recorded for the same area in more than one publication and for this reason some of the records have been omitted.

The rusts are arranged in alphabetical order and the epithets have been taken mostly from the *Manual of the Rusts in United States and Canada* by J. C. Arthur. The names of the hosts are followed by the names of the provinces or other regional areas in which the rusts were collected and these, in turn, are followed by reference numbers. These numbers refer to the publications from which the records were taken.

A list of hosts and the rusts that may be expected to occur on them has also been included. In this list the hosts are listed more completely than in the section devoted to the rusts. The names of the hosts were taken for the most part from *Gray's Manual of Botany*, 8th ed., but in some cases it was found advisable to follow Rydberg's *Flora of the Prairies and Plains of Central North America*. The names of the grass hosts were taken mostly from Hitchcock's *Manual of the Grasses of the United States*.

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SUPPLEMENTARY NOTE

Mr. Brown's "A Check List of Plant Rusts in Canada" is compiled for the most part from published records, but he has included some of his own observations as well. In some instances records of certain rusts and significant host and range extensions of other species given in the annual reports of the "Canadian Plant Disease Survey" or other publications have been overlooked. Also, since Mr. Brown compiled his list several comprehensive studies on the taxonomy of rusts occurring in Canda have appeared. To increase the usefulness of the list, the text covering certain species was revised and the pertinent publications have been added as an addendum to the references. Besides, in the interests of greater clarity, notes about a few rusts have been added in parentheses.

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THE PLANT RUSTS AND THEIR HOSTS

For each rust are shown the known stages, the hosts on which they have been collected, the province, territory or district in which the collections have been made and one or more references to the literature.

Aecidium columbiense Ell. & Ev.
O-I On *Hieracium albiflorum* Hook.; B.C. (1).

Aecidium graebnerianum P. Henn.
(See also *Puccinia praegracilis*)
I On *Habenaria dilatata* (Pursh) Hook; Que. (29).
H. gracilis Wats.; B.C. (1).
H. psychodes (L.) Sw.; Que. (29).
Habenaria sp.; N. S. (29).

Aecidium ligustici Ell. & Ev.
O-I On *Ligusticum scothicum* L.; Que. (1).

Aecidium mitellae Ell. & Ev.
I On *Mitella nuda* L.; Nfld. (1).

Chrysomyxa arctostaphyli Diet.
III On *Arctostaphylos urva-ursi* (L.) Spreng.; B.C., Alta., Yukon, Sask. (1), Man. (2), Mack., Ont., Que. (27).

Chrysomyxa cassandrae (Peck & Clint.) Tranz.
(See *C. ledi* var. *cassandrae*)

Chrysomyxa chiogenis Diet.
O-I On *Picea glauca* (Moench) Voss; Ont. (culture) (32).
P. mariana (Mill.) B.S.P.; Ont. (culture) (32, 35).
II-III On *Chiogenes hispidula* (L.) T. & G.; B.C. (35), Ont., Que., N.S. (27), Nfld. (1, 35).

Chrysomyxa empetri (Pers.) Schroet.
O-I On *Picea engelmanni* (Parry) Engelm.; B.C. (27).
P. glauca (Moench) Voss; Que. (33), N.S. (27), Nfld. (35).
P. rubens Sarg.; Que. (culture) (33).
II-III On *Empetrum nigrum* L.; B.C., Que. (1), Alta., N.S., Nfld. (33), Yukon, Mack., Frank., Man. (27), Keew., Labr. (35).
E. atropurpureum Fern. & Wieg.; Que. (33).
E. eamesii Fern. & Wieg.; Nfld. (33).

Chrysomyxa ledi (Alb. & Schw.) de Bary
O-I On *Picea mariana* (Mill.) B.S.P.; Sask., Ont., N.S. (1)
P. pungens Engelm.; Ont. (1)
P. rubens Sarg.; Ont., N.S. (1)

C. ledi var. *cassandrae* (Peck & Clint.) Savile
O-I On *Picea glauca* (Moench) Voss; N.S. (27).
P. rubens Sarg.; N.S. (27).
II-III On *Chamaedaphne calyculata* (L.) Moench; Man., Ont., N.S. (1), Yukon, Mack., Que. (27).

C. ledi var. *glandulosi* Savile
O-I On *Picea engelmanni* (Parry) Engelm.; B.C. (35)
II-III On *Ledum glandulosum* Nutt.; B.C. (35)

C. ledi var. *groenlandici* Savile

O-I On *Picea mariana* (Mill.) B.S.P.; N.S. (27).
P. rubens Sarg.; N.S. (27).

II-III On *Ledum groenlandicum* Oeder; B.C., Sask., Ont., N.S. (1), Mack., Que. (27), Alta., Nfld. (35).

C. ledi var. *ledi*

II-III On *Ledum palustre* L. var. *decumbens* Ait.; Mack. (35).

C. ledi var. *rhododendri* (de Bary) Savile

II-III On *Rhododendron lapponicum* L.; Mack. (27), B.C., Man., Nfld. (35).

C. ledi var. *vaccinii* Ziller

II-III On *Vaccinium parvifolium* Smith; B.C. (35).

Chrysomyxa ledicola (Peck) Lagerh.

O-I On *Picea engelmanni* (Parry) Engelm.; Alta (1)
P. glauca (Moench) Voss (*P. canadensis* (Mill.) B.S.P.); Alta., Sask., Que., N.B., N.S. (1), Man. (2), Mack., Ont. (27), B.C., Nfld. (35).
P. glauca var. *albertiana* (S. Brown) Sarg.; Yukon (27), B.C. (35).
P. mariana (Mill.) B.S.P.; Alta., Man., Que., N.S., Nfld. (1), Sask., Ont. (2).
P. pungens Engelm.; Ont. (1), Alta., Man., Que., P.E.I. (27).
P. rubens Sarg.; N.S., P.E.I. (1), Que. (27).
P. sitchensis (Bong.) Carr.; B.C. (35).

II-III On *Ledum groenlandicum* Oeder; B.C., Alta., Yukon, Sask., Man., Nfld. (1) Mack., Que. (27).
L. palustre L. var. *decumbens* Ait.; Labr. (1), Yukon, Mack., Frank., Keew. (27).

Chrysomyxa monesis Ziller

O-I On *Picea sitchensis* (Bong.) Carr.; B.C. (36).

II-III On *Moneses uniflora* (L.) Gray; B.C. (35, 36).

Chrysomyxa pirolata (Koern.) Wint. (*C. pyrolae* (DC.) Rostr. *nom. nud.*)

O-I On *Picea glauca* (Moench) Voss (P. *canadensis* (Mill.) B.S.P.); Man. (1), Ont., Que., N.S. (27), Mack. (35).
P. glauca var. *albertiana* (S. Brown) Sarg.; B.C. (27).
P. mariana (Mill.) B.S.P.; B.C., N.S. (27).

II-III On *Moneses uniflora* (L.) Gray.; Alta., Que. (1), Man. (27).
Pyrola americana Sweet; N.S. (1), Man. (2), B.C., Sask., Ont., Que. (27).
P. asarifolia Michx.; B.C., Sask. (1), Man. (27).
P. bracteata Hook.; B.C. (1).
P. chlorantha Sw.; (*P. virens* Schweigg.), Alta. (1), Mack., Que. (27), B.C. (35).
P. elliptica Nutt.; Alta. (1), Man., Que., N.S. (27).
P. grandiflora Radius; Yukon, Keew., Frank. (27).
P. minor L.; Que. (27).
P. picta Smith; B.C. (35).
P. secunda L.,; Que., Nfld. (1), B.C., Mack., Alta., Man. (27).
P. uliginosa T. & G.; N.S. (1).

Chrysomyxa weirii Jacks.

III On *Picea engelmanni* (Parry) Engelm.; B.C. (1).
P. rubens Sarg.; N.B. (9).
P. sitchensis (Bong.) Carr.; B.C. (27).
Picea sp.; N.S. (27).

Chrysomyxa woronini Tranz.

O-I On *Picea glauca* (Moench) Voss; Que. (27), B.C., Nfld. (35).
P. mariana (Mill.) B.S.P.; Nfld. (35).

III On *Ledum groenlandicum* Oeder; Nfld. (35).
L. palustre var. *decumbens* Ait.; Yukon (27).

Coleosporium campanulae (Pers.) Lév.

II-III On *Campanula rapunculoides* L.; Que. (15), Ont. (14)
C. persicifolia L.; B.C. (7).
Campanula spp.; B.C. (7), N.S. (23), Ont. (13).

Coleosporium madiae Cooke

II-III On *Madia sativa* Molina; B.C. (1).

Coleosporium solidaginis (Schw.) Thuem.

O-I On *Pinus banksiana* Lamb.; Alta., Man., Sask. (25), Que. (6).
P. contorta Dougl.; Alta. (1).

II-III Common on *Aster* spp. and *Solidago* spp. in most provinces.

Coleosporium viburni Arth.

II-III On *Viburnum cassinoides* L.; Ont. (1), N.S. (14), N.B. (13).
V. lentago L.; Man., (3), Ont. (14).

Cronartium coleosporioides (Diet. & Holw.) Arth.

O-I On *Pinus contorta* Dougl.; Que., N.B. (21), B.C. (1).
P. ponderosa Dougl.; B.C. (1).

Cronartium comandrae Peck

O-I On *Pinus banksiana* Lamb.; Alta. (1), Sask. (2), Ont. (5).
P. contorta Dougl.; Alta. (1).
P. ponderosa Dougl.; B.C. (1).
Pinus spp.; Man. (21).

II-III On *Comandra livida* Richards.; Man. (2), Que. (1).
C. pallida A. DC.; Alta., Sask. (25), B.C., N.W.T. (1), Man., Sask. (2).
C. umbellata (L.) Nutt.; Ont., Que. (1).

Cronartium comptoniae Arth.

O-I On *Pinus banksiana* Lamb.; Man., Ont. (2).

II-III On *Myrica gale* L.; B.C., N.S., Ont. (1).

Cronartium flaccidum (Alb. & Schw.) Wint.

III On *Impatiens balsamina* L.; P.E.I. (1).

Cronartium ribicola J. C. Fisch.

O-I On *Pinus* spp.; B.C., Que., N.S., P.E.I. (12).

II-III On *Grossularia* spp.; Man. (15), N.S. (22), P.E.I. (20), B.C. (18).
Ribes spp.; B.C., Que., N.B., P.E.I. (12), Man., Ont. (15).

Cumminsiella sanguinea (Peck) Arth.

O-I-II-III On *Mahonia* sp.; B.C. (18), Que., Ont. (21).

Endophyllum sempervivi (Alb. & Schw.) de Bary.

O-III On *Sempervivum tectorum* L.; Ont., B.C. (6).

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Frommea obtusa (Strauss) Arth.
O-I-II-III On *Potentilla canadensis* L.; N.S., Ont. (1).

Gymnoconia peckiana (Howe) Trott.
O-I-III On *Rubus acaulis* Michx.; Sask. (2).
R. articus L.; Sask. (25), Alta. (1).
R. nigrobaccus Bailey; Ont. (1).
R. randii (Bailey) Rydb.; N.S. (1).
R. triflorus Richards.; Man. (2).
Rubus spp.; B.C., Ont., Que., N.B., N.S. (23).

Gymnosporangium aurantiacum Chev. (legitimate name G. *cornutum* Arth.)
O-I On *Sorbus americana* Marsh.; Ont., N.B., Nfld. (1), Man. (2).
S. scopulina Greene; Man., Ont., Que. (1).

Gymnosporangium betheli Kern
O-I On *Crataegus chrysocarpa* Ashe.; Sask. (25), Man. (2).
C. douglasii Lindl.; B.C. (1).
Crataegus spp.; Morden, Man. Dr. W. L. Gordon.
III On *Juniperus scopulorum* Sarg.; Man. (16).

Gymnosporangium clavariaeforme (Jacq.) DC.
O-I On *Amelanchier alnifolia* Nutt.; Man. (1).
A. canadensis (L.) Medic.; N.S. (1), Ont. (6).
A. spicata (*A. ?stolonifera* Wieg.); N.S. (17).
Crataegus chrysocarpa Ashe.; Sask. (25).
Crataegus spp.; P.E.I., B.C. (12), Ont., Que. (23).
Cydonia oblonga Mill.; N.S. (23).
Pyrus communis L.; N.S. (23).
III On *Juniperus communis* L. var. *depressa* Pursh; Ont., Que. (5), N.S. (4).
J. communis L. var. *hibernica* Gord.; P.E.I. (10).
J. communis L.; N.S. (16).

Gymnosporangium clavipes Cooke & Peck
O-I On *Amelanchier* spp.; B.C., Man., Sask., Que., N.B., N.S., Ont., common.
Aronia arbutifolia (L.) Ell.; N.B. (1).
Crataegus punctata Jacq.; Ont. (1).
Crataegus spp.; Man. (2), Ont., Que., N.B., N.S. (23), Sask. (6).
Cydonia oblonga Mill.; Ont., N.S. (23).
Malus pumila Mill.; Ont., Que., N.B., N.S. (23).
Cotoneaster sp.; Man. (20).
Cydonia sp.; Ont. (16), N.S. (20).
III On *Juniperus communis* L. var. *depressa* Pursh; Ont., Que. (5).
J. horizontalis Moench; Que. (5).
J. communis L.; N.S. (17), Que. (12).
Juniperus spp.; Ont. (6).

Gymnosporangium corniculans Kern
O-I On *Amelanchier alnifolia* Nutt.; Man. (1), Sask. (25).
A. sanguinea (Pursh) DC.; Ont. (1).
III On *Juniperus horizontalis* Moench *f. douglasii*; Rehd. Man. (16).
J. virginiana L.; Man. (16).

Gymnosporangium globosum Farl.
O-I On *Crataegus coccinea* L.; Ont. (1).
C. punctata Jacq.; Ont. (1).
C. sanguinea (Pursh) DC.; Ont. (5).
C. tomentosa L.; Ont., Que. (1).
Crataegus sp.; Sask. (2).
Malus pumila Mill.; Ont., Que. (23).
III On *Juniperus virginiana* L.; Ont. (1), Que. (10).
J. horizontalis Moench; Sask. (2).
J. fragrans (cult.); Ont. (5)
Juniperus spp.; Ont. (6).

Gymnosporangium juniperinum (L.) Mart.
(legitimate name, *G. tremelloides* Hartig)
O-I On *Sorbus occidentalis* (Wats.) Greene; Alta., B.C. (11).
S. scopulina Greene; B.C. (1).
S. sitchensis Roem.; B.C. (1).
III On *Juniperus sibirica* Burgsd.; Alta. (1).

Gymnosporangium juniperi-virginianae Schw.
O-I On *Malus coronaria* (L.) Mill.; Ont. (1).
M. pumila Mill.; Ont. (23).
M. sylvestris (L.) Mill.; Ont. (1).
III On *Juniperus virginiana* L.; Ont. (10).

Gymnosporangium juvenescens Kern
O-I On *Amelanchier alnifolia* Nutt.; Alta. (1), Sask., Man. (25).
A. florida Lindl.; B.C. (1).
A. pumila Nutt.; Alta. (1).
III On *Juniperus horizontalis* Moench; Sask. (25), B.C. (24).

Gymnosporangium nelsoni Arth.
O-I On *Amelanchier alnifolia* Nutt.; Alta., B.C. (1), Man. (2).
A. florida Lindl.; B.C. (19).
III On *Juniperus scopulorum* Sarg.; Alta. (1), B.C. (19).

Gymnosporangium nidus-avis Thaxt.
O-I On *Amelanchier intermedia* Spach; Ont. (1).
III On *Juniperus virginiana* L.; Ont. (12).

Gymnosporangium nootkatense (Trel.) Arth.
O-I On *Malus rivularis* (Dougl.) Roem.; B.C. (1).
Sorbus occidentalis (Wats.) Greene; B.C. (1).

Gymnosporangium tubulatum Kern
O-I On *Crataegus* sp.; B.C. (15).

Hyalopsora aspidiotus (Peck) Magn.
O-I On *Abies balsamea* (L.) Mill.; Ont., Que. (1).
II-III On *Phegopteris dryopteris* (L.) Fée; B.C., Ont., Que. (1).

Hyalopsora polypodii (Pers.) Magn.
II-III On *Filix fragilis* (L.) Gilib.; B.C., Ont. (1), Sask. (25).

Kuehneola uredinis (Link) Arth.
O-I-II-III On *Rubus procumbens* Muhl; Ont. (1.)
R. pubescens Raf.; N.S. (1).

Melampsora abietis-canadensis (Farl.) C. A. Ludwig
O-I On *Tsuga canadensis* (L.) Carr.; N.S., Que. (1).
II-III On *Populus grandidentata* Michx. N.S., Ont., Que. (1), P.E.I. (14).
P. tremuloides Michx.; Ont., Que. (1).

Melampsora abieti-capraearum Tubeuf
O-I On *Abies balsamea* (L.) Mill.; Sask. (2), N.S. (1).
II-III On *Salix alba* L. var. *vitellina* L.; Ont. (18).
S. bebbiana Sarg.; N.B. (18).
S. candida Flugge; Sask. (2).
S. cordata Muhl.; Man. (2).
S. purpurea L. var. *gracilis* Anderss.; Man. (14).
S. rubra Richards.; Ont. (14).

Melampsora albertensis
O-I On *Pseudotsuga taxifolia* (Poir.) Britt.
(*P. mucronata* (Raf.) Sudw.; B.C. (1), ?B.C., Alta. (37)
II-III On *Populus tremuloides* Michx.; B.C., Alta. (1, 37).

Melampsora arctica Rostr.
II-III On *Salix anglorum* Cham.; Alta., B.C. (1).
S. arbusculoides Anders.; Alta. (1).
S. balsamifera (Hook.) Barratt; Alta. (1).
S. glaucops Anders.; Alta. (1).
S. petrophila Rydb.; Alta., B.C. (1).
Salix spp.; Alta. (1).

Melampsora bigelowii Thuem.
O-I On *Larix laricina* (DuRoi) Koch.; Alta. (1).
L. lyallii Parl.; Alta. (1).
II-III On *Salix amygdaloides* Anders.; Man. (2).
Salix spp.; Sask., Alta. (25), Man. (19), B.C. (5).

Melampsora farlowii (Arth.) J. J. Davis
III On *Tsuga canadensis* (L.) Carr.; N.S. (1).

Melampsora lini (Pers.) Lév.
O-I-II-III Common on *Linum* spp.

Melampsora medusae Thuem.
O-I On *Larix laricina* (DuRoi) Koch.; N.S. (1).
II-III On *Populus balsamifera* L. (*P. tacamahacca* Mill.); Man. (19), Sask. (25), Nfld. (1).
P. deltoides Marsh.; Man. (25).
P. sargentii Dode.; Alta. (25).
P. tremuloides Michx.; Man. (19), Ont. (24).
Populus spp.; Man., Sask., Alta. (25), Ont. (7), Que. (14).

Melampsora occidentalis Jacks.
O-I On *Pseudotsuga taxifolia* (Poir.) Britt.; B.C., Alta. (37).
II-III On *Populus acuminata* Rydb.; B.C. (1).
P. balsamifera L.; B.C. (1), Sask. (25).
P. trichocarpa T. & G.; B.C. (1, 37), Alta. (13).

Melampsora ribesii-purpurea Kleb.
O-I On *Grossularia divaricata* (Dougl.) Cov. & Britt.; B.C. (1).
Ribes echinatum Lindl.; B.C. (1).
II-III On *Salix bebbiana* Sarg.; Alta. (24)

Melampsorella cerastii (Pers.) Schroet.

O-I On *Abies balsamea* (L.) Mill.; Man., N.B., N.S., Ont., P.E.I., Nfld. (1), Que. (5).
A. grandis Lindl.; B.C. (1).
A. lasiocarpa (Hook.) Nutt.; B.C. (1).
Picea engelmanni (Parry) Engelm.; Sask. (1).
P. excelsa (Lam.) Link; Man. (1).
P. glauca (Moench) Voss (*P. canadensis* (Mill.) B.S.P.); Alta., Sask., Yukon (1), Man., Sask. (2).
P. glauca var. *albertiana* (S. Brown) Sarg.; B.C. (1).
P. mariana (Mill.) B.S.P.; Alta., Que., Nfld. (1), Man., Sask. (2).

II-III On *Cerastium alpinum* L.; B.C. (1).
C. arvense L.; Man., Sask. (25), Alta. (1).
Cerastium spp.; Man., B.C. (1).
Stellaria graminea L.; Ont. (24).
S. longipes Goldie; Alta. (1).

Melampsoridium betulinum (Pers.) Kleb.

II-III On *Betula populifolia* Marsh.; N.S. (1).
B. pumila L.; Nfld. (1).
Betula sp.; Man. (25), Alta. (11).

Milesia darkeri Faull

II-III On *Cryptogramma acrostichoides* R.BR.; B.C. (1).

Milesia fructuosa Faull

O-I On *Abies balsamea* (L.) Mill.; N.S., Ont., Que. (1).

II-III On *Dryopteris intermedia* (Muhl.) Gray; N.S., Que., Ont. (1).
D. spinulosa (O. F. Muell.) Watt.; Que. (1).

Milesia marginalis Faull & Wats.

O-I On *Abies balsamea* (L.) Mill.; Ont. (1).

II-III On *Dryopteris marginalis* (L.) Gray.; Ont., Que. (1).

Milesia polypodophila (Bell) Faull

O-I On *Abies balsamea* (L.) Mill.; N.S., Ont., Que. (1).

II-III On *Polypodium virginianum* L.; N.S., Ont., Que. (1).

Nyssopsora clavellosa (Berk.) Arth.

III On *Aralia nudicaulis* L.; N.S., N.B., Ont., Que., Nfld. (1), Sask., Man. (2).

Phragmidium americanum (Peck) Diet.

O-I-II-III On *Rosa blanda* Ait.; Ont. (1).
R. virginiana Mill.; N.S., Ont. (1).
Rosa spp.; Ont. (1), Que. (14), N.B., N.S. (23).

Phragmidium andersoni Shear

I-II-III On *Dasiphora fruticosa* (L.) Rydb. (*Potentilla f.* L.); Alta., B.C., N.B., Ont. (1), Man., Sask. (2), Que. (14).

Phragmidium disciflorum (Tode) J. F. James
(legitimate name, *P. mucronatum* (Pers.) Schlecht.)

O-I-II-III On *Rosa* spp., N.B. (1), B.C., Que., N.S. (23), Ont. (14), Man. (25).

Phragmidium subcorticinum (Schrank) Wint.

Reported from Kentville N.S. (14), Ont. (20). On *Rosa* spp. Spore stage in doubt.

Phragmidium ivesiae Syd.
I-II-III On *Potentilla bipinnatifida* Dougl.; Man. (2).
P. nuttallii Lehm.; Alta. (1), Sask. (2).
Potentilla spp.; Alta. (1), Alta., Sask. (25).

Phragmidium montivagum Arth.
O-I-II-III On *Rosa blanda* Ait.; Man. (25).
R. bourgeauiana Crépin; Alta. (1).
Rosa sp.; Man. (25).

Phragmidium occidentale Arth.
O-I-II-III On *Rubus parviflorous* Nutt.; B.C. (1).

Phragmidium potentillae (Pers.) Karst.
O-I-II-III On *Potentilla* spp.; N.W.T., Alta., Man., Sask., Nfld. (1).

Phragmidium rosae-acicularis Liro
O-I-II-III On *Rosa* spp.; Alta., B.C., Ont., Man. (1).

Phragmidium rosae-arkansanae Diet.
O-I-II-III On *Rosa suffulta* Greene; Alta. (1).
II-III On *Rosa* sp.; Sask., Alta. (25).

Phragmidium rosae-californicae Diet.
O-I-II-III On *Rosa* spp.; B.C. (1).

Phragmidium rosae-pimpinellifoliae Diet.
O-I-II-III On *Rosa* spp.; Que., P.E.I. (23).

Phragmidium rosicola (Ell. & Ev.) Arth.
III On *Rosa suffulta* Greene; Alta. (1).
Rosa sp.; Sask. (1).

Phragmidium rubi-idaei (DC.) Karst.
O-I-II-III On *Rubus* spp.; Alta., B.C., Man., N.B., N.S., Ont., Sask., Que., Nfld. (1).
R. idaeus L. var. *strigosus* Maxim.; Man. (2).
R. occidentalis L.; Nfld. (1).

Phragmidium rubi-odorati Diet.
I-II-III On *Rubus odoratus* L.; Ont. (1).

Phragmidium speciosum (Fries) Cooke
O-I-III On *Rosa blanda* Ait.; N.S. (1).
R. macounii Greene; Sask. (2).
R. virginiana Mill.; N.S. (1).
Rosa spp.; Man., Sask., (25) Alta., Ont., Que., N.B., N.S. (23).

Pileolaria toxicodendri (Berk. & Rav.) Arth.
O-II-III On *Rhus aromatica* Ait.; Ont. (1).
R. radicans L.; Man., Ont., Que. (1).
(*R. toxicodendron* auct.); Man. (2), Que. (13).

Puccinia absinthii (Hedw.f.) DC.
II-III On *Artemesia cana* Pursh; Sask., Alta. (25).
A. frigida Willd.; Sask., Alta. (25), Man. (6).
A. gnaphalodes Nutt.; Man. (2).
A. ludoviciana Nutt.; B.C. (1).

Puccinia adoxae (Hedw.f.) DC.
III On *Adoxa* sp.; Alta. (26).

Puccinia albulensis Magn.

III On *Veronica alpina* L. var. *unalaschcensis* C. & S. (*V. wormskjoldii* R. & S.); B.C. (1).

Puccinia amphigena Diet.

O-I On *Maianthemum canadense* Desf.; Sask. (2).
Nemexia lasioneuron (Hook.) Rydb.; Man., Sask. (25).
Smilacina stellata (L.) Desf.; Sask. (25)
Smilax herbacea L.; Man. (2).

II-III On *Calamovilfa longifolia* (Hook.) Hack.; Man. (2).

Puccinia andropogonis Schw.

P. andropogonis var. *micropunctata* Arth.

O-I On *Castilleja sessiliflora* Pursh; Sask. (2).

P. andropogonis var. *melampyri* Arth.

O-I On *Melampyrum lineare* Lam.; Ont. (1).

P. andropogonis var. *onobrychidis* Arth.

O-I On *Lupinus perennis* L.; N.S. (1).
Petalostemon candidus (Willd.) Michx.; Man. (2).
P. purpureus (Vent.) Rydb.; Man. (2).

P. andropogonis var. *pentstemonis* Arth.

O-I On *Pentstemon acuminatus* Dougl.; Sask. (1), Man. (2).
P. albidus Nutt.; Sask. (2).
P. eriantherus Pursh; Sask. (2).
P. nitidus Dougl.; Sask. (2).

P. andropogonis var. *polygalina* Arth.

O-I On *Polygala senega* L.; Man. (2).

P. andropogonis var. *pustulata* Arth.

O-I On *Comandra pallida* A. DC.; Man. (2).
C. umbellata (L.) Nutt.; Ont. (1), Man. (2).

II-III On *Andropogon provincialis* Lam.; Ont. (1).
A. scoparius Michx.; Man., Sask. (2).

Puccinia anemones-virginianae Schw.

III On *Anemone canadensis* L.; Man., Sask. (2).
A. riparia Fern.; Man. (16).
A. virginiana L.; Ont., Que. (1).

Puccinia angelicae (Schum.) Fuckel

II-III On *Zizia aurea* (L.) Koch; Man. (25).

Puccinia angustata Peck

O-I On *Lycopus americanus* Muhl.; Ont.(1).
L. asper Greene; Sask. (25).
L. rubellus Moench; Ont. (1).
Lycopus spp.; N.B., Ont. (1).
Mentha arvensis L.; N.S. (1).
M. canadensis L.; Man. (1).
M. glabrior (Hook.) Rydb.; Man. (25).
Senecio triangularis Hook.; B.C. (1).

II-III On *Eriophorum angustifolium* Roth.; Sask. (25).
E. viridicarinatum (Engelm.) Fern.; B.C. (1).
Scirpus atrovirens Muhl.; Ont., Que. (1), Man. (25).
S. cyperinus (L.) Kunth.; N.S., Que., Ont. (1).
S. microcarpus Presl; Man. (25), Sask. (2).

Puccinia antirrhini Diet. & Holw.
II-III On *Antirrhinum majus* L.; all provinces except Nfld. (23).

Puccinia arabicola Ell. & Ev.
O-I-III On *Cardamine douglasii* (Torr.) Britt.; Ont. (1).

Puccinia arenariae (Schum.) Wint.
III On *Honkenya peploides* (L.) Ehrh.; N.S. (1).
Merckia physodes Fisch.; N.W.T. (1).
Moehringia lateriflora (L.) Fenzl; Sask. (2).
Stellaria longifolia Muhl.; Sask. (2).
S. longipes Goldie; Alta. (1), Sask. (2).

Puccinia areolata Diet. & Holw.
O-I-II-III On *Caltha leptosepala* DC.; B.C., Sask. (1).

Puccinia argentata (Schultz) Wint.
O-I On *Adoxa* sp.; Alta. (26).
II-III On *Impatiens biflora* Walt.; Sask. (2).
I. pallida Nutt.; Alta. (1).
I. noli-tangere L.; Alta. (26).

Puccinia aristidae Tracy
O-I On *Triglochin maritima* L.; Alta. (1), Sask. (2).
Polygonum erectum L.; Sask. (2).
P. neglectum Bess.; Sask. (2).
Chenopodium album L.; Alta. (1), Man., Sask. (2).
Sarcobatus vermiculatus (Hook.) Torr.; Sask. (2).
Spinacia oleracea L.; Alta. (1).
Cheirinia cheiranthoides (L.) Link; Sask. (2).
Draba lutea Gilib.; Alta. (1).
Sisymbrium altissimum L.; Sask. (2).
Thlaspi arvense L.; Sask. (2).
Glaux maritima L.; Sask. (1)
Lappula echinata Gilib.; Man. (2).
Plantago eriopoda Torr.; Sask., Alta. (2).
II-III On *Distichlis spicata* (L.) Greene; Alta. (1), Man., Sask. (2).

Puccinia asarina Kunze
III On *Asarum caudatum* Lindl.; B.C. (1).

Puccinia asparagi DC.
O-I-II-III On *Asparagus officinalis* L.; Man., Sask. (2), B.C. (12), Que. (11), Ont. (13), N.S. (10), N.B. (5), P.E.I. (3).

Puccinia asteris Duby
III On *Aster cordifolius* L.; Ont. (2).
A. ericoides L.; Sask. (2).
A. laevis L.; Sask. (25).
A. lindleyanus T. & G.; Man. (2).
A. novae-angliae L.; Man. (25) Ont. (14).
Psilactis asteroides Gray; Nfld. to B.C. (1).

Puccinia atrofusca (Dudl. & Thomp.) Holw.
O-I On *Artemesia biennis* Willd.; Alta. (1).
A. camporum Rydb.; Alta. (1), Sask. (2).
A. caudata Michx.; Alta. (1).
A. frigida Willd.; Alta. (1).

A. glauca Pall.; Sask. (2).
A. gnaphalodes Nutt.; Man., Sask., Alta. (2).
A. purshiana Bess.; Alta. (1), Sask. (2).

II-III On *Carex douglasii* Boott; Alta. (1), Man. (2).
C. eleocharis Bailey; Yukon (1).
C. filifolia Nutt.; Alta. (1), Sask. (2).
C. praegracilis Boott; Man. (2).
C. rossii Boott; B.C. (1).

Puccinia atropuncta Peck & Clint.

II-III On *Zygadenus chloranthus* Richards.; Sask. (2), Ont. (1).

Puccinia balsamorhizae Peck

O-I-II-III On *Balsamorrhiza sagittata* (Pursh) Nutt.; B.C. (1.)

Puccinia bardanae (Wallr.) Cda.

O-I-II-III On *Arctium minus* Schk.; N.S., Ont. (1), Man. (2).

Puccinia bistortae (Strauss) DC.

II-III On *Bistorta vivipara* (L.) S. F. Gray; Alta., Ont. (1), Que. (6).

Puccinia blasdalei Diet. & Holw.

O-I-II-III On *Allium textile* N. & M.; Alta. (1).

Puccinia bolleyana Sacc.

II-III On *Carex intumescens* Rudge; N.S. (1).
C. lupuliformis Sartw.; Ont. (1).

Puccinia calthae (Grev.) Link

O-I-II-III On *Caltha palustris* L.; Man. (1), Ont. (1).

Puccinia calthaecola Schroet.

O-I-II-III On *Caltha palustris* L.; Man. (1), Sask. (2).

Puccinia campanulae Carm.

III On *Campanula rotundifolia* L. var. *intercedens* Witasek.; Que. (17)

Puccinia canadensis Arth.

III On *Viola orbiculata* Geyer.; Alta., B.C. (1).

Puccinia canaliculata (Schw.) Lagerh.

II-III On *Cyprus strigosus* L.; Ont. (1).

Puccinia caricis (Schum.) Schroet.
(legitimate name, *P. caracina* DC.)

P. caricis var. *urticata* (Kern) Arth.

O-I On *Urtica dioica* L.; Ont. (1).
U. gracilis Ait.; Ont. (1), Man. (2).
U. lyallii Wats.; B.C. (1), Sask. (2).

II-III On *Carex vesicaria* L.; Man., Sask. (2).
Carex spp.; Man., Sask. (2).

P. caricis var. *grossulariata* Arth.

O-I On *Grossularia cynosbati* (L.) Mill.; Ont., Que. (1).
G. hirtella (Michx.) Spack; N.S. (1).
G. setosa (Lindl.) Cov. & Britt.; Alta. (1).
Ribes americanum Mill.; Ont. (1), Man., Sask. (2).
R. bracteosum Dougl.; B.C. (1).
R. glandulosum Grauer; Alta., B.C., N.S., Labr. (1).
R. grossularia L. (*Grossularia uva-crispa* (L.) Mill.); Man., Sask. (2).

R. hudsonianum Richards.; Alta. (1).
R. lacustre (Pers.) Poir.; Alta., Ont. (1).
R. laxiflorum Pursh; B.C. (1).
R. oxycanthoides L. (*G. o.* (L.) Mill.); Man., Sask. (2).
R. nigrum L.; Sask. (2).
R. setosum Lindl.; Sask. (2).
Ribes spp.; N.B., P.E.I. (23).
II-III On *Carex* spp.; Man., Sask. (2).

P. caricis var. *uniporula* (Orton) Arth.
O-I On *Grossularia cynosbati* (L.) Mill.; Ont. (1).
II-III On *Carex* spp.; Nfld., N.S., Que., Ont. (1).

Puccinia caricis-shepherdiae J. J. Davis
O-I On *Elaeagus angustifolia* L.; Sask. (1), Man. (16). B.C. (8).
E. commutata Bernh.; Alta., Man., Sask. (2).
Shepherdia argentea Nutt.; Sask. (2).
S. canadensis (L.) Nutt.; Man., Sask. (2), Alta., Ont., Nfld. (1).
II-III On *Carex aquatilis* Wahl.; Sask. (1).
C. atherodes Spreng.; Sask. (2).
C. eburnea Boott; Ont., Que. (1).
C. lanuginosa Michx.; Sask. (2).
C. substricta (Kuekenth.) Mack.; Sask. (2).
C. vesicaria L., Sask. (2).

Puccinia carthami Corda
O-II-III On *Carthamus tinctorius* L.; Alta., Man. (14), Sask. (12).

Puccinia cicutae Lasch
O-I-II-III On *Cicuta maculata* L.; N.S., Man. (1).
C. occidentalis Greene; Sask. (2).

Puccinia circaeae Pers.
III On *Circaea alpina* L.; Nfld., N.S., Ont., Sask. (1), Man. (2) Que. (5).
C. latifolia Mill.; N.S., Que., Ont (1).
C. pacifica Asch. & Magn.; B.C. (1).

Puccinia cirsii Lasch
O-I-II-III On *Cirsium flodmanii* (Rydb.) Arth.; Man., Sask. (2).
C. undulatum (Nutt.) Spreng.; Alta. (1), Man. (2).
Cirsium spp.; Sask. (2).

Puccinia cnici Mart.
O-I-II-III On *Cirsium lanceolatum* (L.) Hill; B.C., Ont. (1).

Puccinia cockerelliana Bethel
II-III On *Festuca scabrella* Torr.; Alta. (1).

Puccinia comandrae Peck
II-III On *Comandra livida* Richards.; Man. (2).
C. pallida A. DC.; Sask. (2).

Puccinia commutata Syd.
O-I-III On *Valeriana septentrionalis* Rydb.; Alta. (1).
V. sitchensis Bong.; B.C. (1).

Puccinia conglomerata (Strauss) Schmidt & Kunze
III On *Petasites frigidus* (L.) Fries; Alta., B.C. (1).
P. palmatus (Ait.) Gray; Alta., Ont., Sask. (1), Man. (2).

Puccinia convolvuli (Pers.) Cast.

O-I-II-III On *Convolvulus sepium* L.; Que. (1), Man. (2).

Puccinia coronata Corda

O-I On *Elaeagnus commutata* Bernh.; Man., Sask. (25).
Rhamnus alnifolia L'Her.; Man., Sask., Ont. (1), Que. (17).
R. cathartica L.; Sask., Ont. (1), Man. (2), B.C., Que., N.B., N.S., P.E.I. (23).
R. davurica Pall.; Man. (22).
R. frangula L.; N.B. (18).
R. purshiana DC.; B.C. (1).
R. utilis Decne.; Man. (22).
Shepherdia canadensis (L.) Nutt.; Alta., Yukon, Sask., Man. (1).

II-III Common on oats and many cultivated and native grasses. Varieties of this rust species have been separated in Europe and North America.

The varieties of this rust found in Canada are:

P. coronata var. *avenae* Erikss.

O-I On *Rhamnus cathartica* L. (1).
II-III On *Avena fatua* L. (1).
Avena spp., (1).
Lamarkia aurea (L.) Moench (*Achyrodes aureum* Ktze.) (1).

P. coronata var. *calamagrostis* Fraser & Led.

O-I On *Rhamnus alnifolia* L'Her. (1).
II-III On *Calamagrostis canadensis* (Michx.) Beauv. (1).
C. elongata (Kearney) Rydb. (1).
Scolochloa festucacea Link (1).

P. coronata var. *bromi* Fraser & Led.

O-I On *Shepherdia canadensis* (L.) Nutt. (1)
II-III On *Bromus ciliatus* L. (1).
B. latiglumis (Shear) Hitchc. (1).
B. pumpellianus Scribn. (1).

P. coronata var. *elaeagni* Fraser & Led.

(O)-I On *Elaeagnus commutata* Bernh. (1).
II-III On *Calamagrostis montanensis* Scribn. (1).

(Besides the varieties reported above, var. *agrostis* Erikss. has been isolated from aecia on *Rhamnus frangula* from N.B., var. *festucae* Erikss. from aecia on *R. cathartica* from Eastern Canada, and an apparently new variety (20), subsequently named *P. coronata* f.sp. *secalis* by B. Peturson (Can. J. Botany 32:42 1954), from aecia on *R. cathartica* from Man. and Eastern Canada; II-III on *Agropyron repens* (L.) Beauv.; capable of attacking other wild grasses and cultivated varieties of *Hordeum vulgare* and *Secale cereale*).

Puccinia crandallii Pamm. & Hume

O-I On *Symphoricarpos albus* (L.) Blake; B.C. (1).
S. occidentalis Hook.; Sask. (1), Man. (2).
Symphoricarpos spp.; Alta. (23).

II-III On *Festuca ovina* L.; Sask. (2).
F. saximontana Rydb.; Sask. (1).

Puccinia cruciferarum Rud.
III On *Cardamine bellidifolia* L.; B.C. (1).

Puccinia cryptotaeniae Peck
O-III On *Cryptotaenia canadensis* (L.) DC.; Que. (1).

Puccinia cyani (Schleich.) Pass.
O-I-III On *Centaurea cyanus* L.; Ont. (1), B.C. (16), N.S. (23).

Puccinia cypripedii Arth. & Holw.
II On *Cypripedium parviflorum* Salisb.; Sask. (1).

Puccinia dayi G. W. Clint.
III On *Steironema ciliatum* (L.) Raf.; Ont., Alta., Sask. (1).

Puccinia difformis Kunze
O-I-III On *Galium aparine* L.; B.C. (1).

Puccinia distichlidis Ell. & Ev.
O-I On *Glaux maritima* L.; Sask. (25).
Steironema ciliatum (L.) Raf.; Man., Sask. (25).
II-III On *Spartina gracilis* Trin.; Sask., Man. (25).
S. pectinata Link (*S. michauxiana* Hitchc.); Man. (1), Sask., (25).
Spartina sp.; Sask. (25).

Puccinia douglasii E. & E.
O-I-III On *Phlox hoodii* Richards.; Alta., Sask. (1).

Puccinia drabae Rud.
III On *Draba arabisans* Michx.; Que. (1).
D. incerta Payson; Alta. (1).
Draba sp.; Man. (2).

Puccinia eatoniae Arth.
P. eatoniae var. *ranunculi* Mains
O-I On *Ranunculus abortivus* L.; Ont. (1), Man. (2).
II-III On *Sphenopholis obtusata* (Michx.) Scribn.; Sask. (1).
S. pallens (Spreng.) Scribn.; Sask. (1).

Puccinia eleocharidis Arth.
O-I On *Eupatorium perfoliatum* L.; N.S., Ont. (1).
E. purpureum L.; N.S., Ont. (1).
E. purpureum var. *maculatum* (L.) Darl.; Man. (2).
II-III On *Eleocharis palustris* (L.) R. & S.; Ont., Que. (1).
Eleocharis spp.; Man. (2).

Puccinia ellisiana Thuem.
O-I On *Viola nephrophylla* Greene.; Sask. (25).
Viola sp.; Man., Sask. (25).
II-III On *Andropogon provincialis* Lam.; Sask. (25), Man. (6).
Schizachyrium scoparium (Michx.) Nash; Sask. (25).

Puccinia emaculata Schw.
II-III On *Panicum capillare* L.; Ont. (1).

Puccinia epilobii DC.
III On *Epilobium alpinum* L.; Que. (1).
Epilobium sp.; Sask. (25).

Puccinia erigeniae (Orton) Arth.
O-I-III On *Erigenia bulbosa* (Michx.) Nutt.; Ont. (1).

Puccinia extensicola Plowr.
(legitimate name, *P. dioicae* P. Magn.)
P. extensicola var. *asteris* Arth.
I On *Aster* spp.; Man., Sask. (2).
II-III On *Carex* spp.; Man., Sask. (2).
P. extensicola var. *erigerontis* Arth.
II-III On *Carex* spp.; B.C. and east of the Rocky Mts. (1).
P. extensicola var. *solidaginis* Arth.
I On *Solidago nemoralis* Ait.; Man. (2).
S. rigida L.; Man. (2).
S. serotina Ait.; Sask., Man. (2).
II-III On *Carex* spp.; Man., Sask. (2).
P. extensicola var. *euthamii* Arth.
I On *Euthamia graminifolia* (L.) Nutt. (*Solidago g.* (L.) Salisb.); Ont. (1).
II-III On *Carex scoparia* Schk.; N.S., Ont., Que. (1).
P. extensicola var. *oenotherae* Arth.
I On *Chamaenerion spicatum* (Lam.) S. F. Gray; Sask., Man. (1).
Oenothera biennis L.; Man., Sask. (2).
II-III On *Carex sartwelli* Dewey; Man. (2).
P. extensicola var. *hieraciata* Arth.
I On *Senecio columbianus* Greene; Sask. (1).
S. flavulus Greene; Alta. (1).
Hieracium scabriusculum Schw.; Man., Sask. (2).
Lactuca pulchella (Pursh) DC.; Man., Sask. (2).
L. sativa L.; Man., Sask. (2), Alta., Ont., Que., N.B., N.S. (23).
Lygodesmia juncea (Pursh) D. Don; Sask. (2).
Nabalus albus (L.) Hook.; Man. (2).
Agoseris glauca (Nutt.) Greene; Sask. (2).
II-III On *Carex sprengelii* Dewey; Sask. (2).
Carex spp.; Man., Sask. (2).
P. extensicola var. *phrymae* Arth.
II-III On *Carex sprengelii* Dewey; Ont. (1).
Puccinia fergussoni Berk. & Br.
III On *Viola langsdorfii* Fisch.; B.C. (1).
V. mackloskeyi Lloyd; B.C. (1).
V. nephrophylla Greene; B.C. (1).
Puccinia festucae (DC.) Plowr.
O-I On *Lonicera caerulea* L.; N.B. (1).
Puccinia fischeri Cruchet & Mayor
III On *Saxifraga oppositifolia* L.; Yukon (34).
Puccinia fraseri Arth.
III On *Hieracium scabrum* Michx.; N.S., Que. (1).
Puccinia gentianae (Str.) Link
O-I-II-III On *Gentiana affinis* Griesb.; Sask. (1).
G. andrewsii Griesb.; Ont. (1).
G. interrupta Greene; Sask. (1).

Puccinia gigantea Karst.

III On *Chamaenerion spicatum* (Lam.) S. F. Gray; Alta., Man. (1).

Puccinia gigantispora Bubak

O-I-III On *Anemone cylindrica* Gray; Alta., B.C., Sask. (1).
A. globosa Nutt.; Alta., B.C. (1).

Puccinia glumarum (Schmidt.) Erikss. & Henn.

II-III Common on graminaceous hosts in southwestern Sask., in Alta. and B.C.

Puccinia graminis Pers.

O-I On *Berberis vulgaris* L.; wherever this host occurs.
B. aquifolium Pursh, (*Mahonia a.* (Pursh) Nutt.); Sask. (2).
Berberis spp.; Que. (16), Ont. (6).
Mahonia sp.; Ont. (6).

II-III Common on graminaceous hosts.

The following varieties of this rust occur in Canada:—

P. graminis var. *avenae* Erikss. & Henn.

II-III On *Avena* spp.; common.

P. graminis var. *poae* Erikss. & Henn.

II-III On *Poa spp.*; Man. (6).

P. graminis var. *phlei-pratensis* (Erikss. & Henn.) Stakm. & Piem.

II-III On *Phleum pratense* L.; common.
Brachypodium pinnatum Beauv.; Man. (16).

P. graminis var. *secalis* Erikss. & Henn.

II-III On *Secale cereale* L.; common.
Hordeum vulgare L.; fairly common.

P. graminis var. *tritici* Erikss. & Henn.

II-III On *Triticum* spp.; common.
Agropyron spp.; common.
Hordeum jubatum L.; common.
Hordeum vulgare L.; common.

(To the varieties mentioned above may be added *P. graminis* var. *agrostidis* Erikss., which T. Johnson and G. J. Green (Can. J. Botany 29: 1-9. 1951) found to be the second most common variety isolated from aecia on naturally infected barberry in eastern Canada).

Puccinia granulispora Ell. & Gall.

O-I-II-III On *Allium cernuum* Roth; Alta, B.C. (1).
Allium sp.; B.C. (1).

Puccinia grindeliae Peck

III On *Grindelia perennis* A. Nels.; Alta., Sask. (2).
G. squarrosa (Pursh) Dunal.; Alta., Sask. (25).
Lygodesmia juncea (Pursh) D. Don.; Man. (25).
Sideranthus spinulosus (Pursh) Sweet; Sask. (25).

Puccinia grumosa Syd. & Holw.

O-I-II-III On *Zygadenus elegans* Pursh; B.C. (1).

Puccinia haleniae Arth. & Holw.

III On *Gentiana amarella* L. var. *acuta* (Michx.) Herder; Ont. (2).

Puccinia helianthi Schw.
O-I-II-III On *Helianthus annuus* L.; cult. common.
H. aridus Rydb.; Sask. (2).
H. fascicularis Greene; Man. (1), Sask. (2), Alta. (14).
H. giganteus L.; Ont. (1), Sask. (25).
H. maximiliani Schrad.; Man. (25).
H. rigidus (Cass.) Desf.; Ont. (1).
H. strumosus L.; Ont. (1).
H. subrhomboideus Rydb.; Sask. (25).
H. subtuberosus Bourg.; Alta. (2).
H. tuberosus L.; Ont. (1), Man. (2), N.S. (23).

Puccinia heucherae (Schw.) Diet.
P. heucherae var. *austroberingiana* Savile
III On *Mitella breweri* Gray; B.C. (1, 34).
M. trifida Graham; B.C. (34).
Saxifraga punctata sspp.; B.C., Yukon, Keew. (34).
Tellima grandiflora (Pursh) Dougl.; B.C. (1, 34).

P. heucherae var. *heucherae*
III On *Heuchera cylindrica* Dougl. var. *glabella* (T. & G.) Wheelock; B.C. (34).
H. glabra Willd.; B.C. (1, 34).
H. micrantha Dougl. ex. Lindl. vars.; B.C. (34).
H. ovalifolia Nutt.; Alta. (1), B.C. (34).
Mitella diphylla L.; Ont. (1).
M. nuda L.; Alta., Sask., Ont. (1), Man. (2), B.C., Mack., Que., Nfld. (34).
M. ovalis Greene; B.C. (34).
Saxifraga lyallii Engler (*Micranthes l.* (Engler) Small); B.C. (34), Alta. (1, 34).
Tiarella cordifolia L.; Ont. (1, 34), Que. (1).
T. unifoliata Hook.; B.C. (1, 34).
Tolmiea menziesii (Pursh) T. & G.; B.C. (34).

P. heucherae var. *saxifragae* (Schlecht.) Savile
III On *Heuchera cylindrica* Dougl. var. *trionalis* R.B. & L.; B.C., Alta. (34).
H. ovalifolia Nutt.; B.C. (34).
H. richardsonii R.Br.; Man. (1, 34).
Saxifraga cernua L.; Mack., Frank., Keew., Que. (34).
S. hieracifolia Waldst. & Kit.; Frank., Keew. (34).
S. nivalis L.; Frank., Keew. (34).
S. occidentalis S. Wats. ssp. *rufidula* (Small) Basigalupi; B.C. (34).
S. rivularis L.; B.C. (1, 34), Frank., Que., Labr. (34).
S. tenuis (Wallr.) Sm.; Frank. (34).
S. virginiensis Michx.; Que. (34).

Puccinia hieracii (Schum.) Mart.
O-I-II-III On *Agoseris glauca* (Nutt.) Greene; Sask. (2).
Apargia autumnalis (L.) Hoffm.; N.S. (1).
Cichorium intybus L.; Ont., Que., N.S. (1).
Crepis runcinata (James) T. & G.; Sask. (2).

Hieracium canadense Michx.; Alta., Ont., Que. (1), Man. (2).
H. scabriusculum Schw.; Sask., Man. (2).
H. scabrum Michx.; Man. (2), N.S. (1).
Taraxacum dumetorum Greene; Sask. (2).
T. kok-saghyz Rod.; Alta., Man., Ont., N.S. (14).
T. vulgare (Lam.) Schr.; B.C., Alta., Sask., Ont., Que., N.S. (1), Man. (2).

Puccinia holboellii (Hornem.) Rostr.
O-III On *Arabis divaricarpa* Nels.; Alta. (1).
A. drummondii A. Gray; B.C. (1).
A. lignipes A. Nels.; Alta. (1).
A. lyallii Wats.; B.C. (1).

Puccinia hordei Otth
II-III Common (23). On cultivated barley in most provinces, particularly Ont. and Que.

Puccinia intermixta Peck
O-I-III On *Iva axillaris* Pursh; Sask., Man. (2).

Puccinia investita Schw.
O-I-III On *Gnaphalium macounii* Greene; Ont. (1).

Puccinia iridis (DC.) Wallr.
II-III On *Iris versicolor* L.; N.S., Ont., Que. (1), Man. (2).
Iris sp.; N.B., P.E.I. (4), Que. (15).

Puccinia karelica Tranz.
I On *Trientalis americana* Pursh; N.S. (1).
II-III On *Carex paupercula* Michx.; N.S. (1).

Puccinia koeleriae Arth.
O-I On *Mahonia aquifolium* (Pursh) Nutt.; B.C. (1).
M. repens (Lindl.) Don.; B.C. (1).
II-III On *Koeleria cristata* (L.) Pers.; Sask. (25).

Puccinia lapsanae (Cooke) Fckl.
O-I-II-III On *Lapsana communis* L.; Ont. (1).

Puccinia liatridis (Webber) Bethel
O-I On *Liatris aspera* (Michx.) Greene; Man., Sask. (2).
L. ligulistylis (A. Nels.) Rydb.; Sask. (2).
L. punctata Hook.; Sask. (2).
II-III On *Agrostis hyemalis* (Walt.) B.S.P.; Man., Sask. (2).

Puccinia ligustici Ell. & Ev.
III On *Ligusticum apiifolium* (Nutt.) Gray; B.C. (1).

Puccinia limosae Magn.
O-I On *Naumburgia thyrsiflora* (L.) Duby; Ont., Man. (1).
II-III On *Carex limosa* L.; Ont. (1).
C. stratiformis Britt.; Que. (1).

Puccinia linkii Klotzsch
III On *Viburnum pauciflorum* Pylaie; Man., Sask., Que. (1).

Puccinia lobeliae Ger.
III On *Lobelia syphilitica* L.; Ont. (1).

Puccinia maculosa Schw.
III On *Agoseris glauca* (Nutt.) Greene; Alta. (1).
Nabalus racemosus (Michx.) DC.; Que. (1).

Puccinia magnusiana Koern.
O-I On *Anemone canadensis* L.; Sask. (1), Man. (2).
II-III On *Phragmites communis* Trin.; Man. (2).

Puccinia malvacearum Bert.
III On *Althaea ficifolia* (L.) Cav.; Ont. (1).
A. rosea (L.) Cav.; common.
Malva moschata L.; Ont. (1).
M. rotundifolia L.; Ont. (1), Man. (2), Que. (6).
Malva spp.; Man., Que., Ont. (23).

Puccinia mariae-wilsoni G. W. Clint.
O-I-III On *Claytonia caroliniana* Michx.; Ont. (1).
C. virginica L.; Ont., Que. (1).

Puccinia marylandica Lindr.
O-I-II-II On *Sanicula marilandica* L.; Alta., Sask., Man. (1).
Sanicula sp.; N.S. (1).

Pucinia mcclatchieana Diet. & Holw.
II-III On *Scirpus microcarpus* Presl; B.C., N.S. (1).

Puccinia menthae Pers.
O-I-II-III On *Clinopodium vulgare* L.; Ont. (1).
Mentha arvensis L.; N.S. (1).
M. canadensis L.; N.S., Que., Ont., Sask., Alta. (6), B.C. (5).
M. glabrior (Hook.) Rydb.; Man., Sask. (2).
M. piperta L.; Man. (15).
M. spicata L.; Ont. (1), B.C. (22).
Monarda didyma L.; Ont. (1).
M. fistulosa L.; Alta., Ont., Man. (1).
M. menthaefolia Benth.; Alta. (1), Sask. (2).
M. mollis L.; Alta., Man., Yukon (1).
M. mollis var. *menthaefolia* Fern.; B.C. (6).
Pycnanthemum flexuosum (Walt.) B.S.P.; Ont. (1).
P. virginianum (L.) Dur. & Jacks.; Ont. (1).

Puccinia mesomajalis Berk. & Curt.
III On *Clintonia borealis* (Ait.) Raf.; N.S. (1), Ont. (2).
C. uniflora (Schult.) Kunth; B.C. (1).

Puccinia microica Ellis
II-III On *Cryptotaenia canadensis* (L.) DC.; Que. (1).

Puccinia millefolii Fuckel
III On *Achillea millefolium* L.; Man., Sask. (2), Que. (20).
A. multiflora Hook.; Alta. (1).
A. ptarmica L.; Que. (17, 20).
Artemisia frigida Willd.; Man. (2), B.C. (1).

Puccinia minussensis Thuem.
O-I-II-III On *Lactuca pulchella* (Pursh) DC.; Man., Sask., Alta., B.C. (1).

Puccinia minutissima Arth.
O-I On *Decodon verticillatus* (L.) Ell.; Ont. (1).
II-III On *Carex lasiocarpa* Ehrh.; Ont. (1).
C. substricta (Kuek.) Mack.; Ont. (1).

Puccinia monoica (Peck) Arth.

O-I On *Arabis brachycarpa* (T. & G.) Britt.; Alta. (1), Sask. (2).
A. drummondii Gray; Alta. (1).
A. lyrata L.; Ont. (1).
A. nuttallii B. L. Rob.; B.C. (1).
A. ovata (Pursh) Poir.; Sask. (2).
A. retrofracta Grah.; B.C. (1), Sask. (2).
Arabis spp.; Man. (2).

II-III On *Koeleria cristata* (L.) Pers.; Sask. (2).
Trisetum spicatum (L.) Richt.; Sask. (2).

Puccinia montanensis Ellis

II-III On *Agropyron trachycaulum* (Link) Malte var. *unilaterale* (Cassidy) Malte; Man. (16).
Agropyron spp.; Alta., Sask., Man. (1).
Elymus canadensis L.; Alta., Man. (1).
E. curvatus Piper; Man. (1).
E. dahuricus Turcz.; Man. (14).

Puccinia obscura Schroet.

II-III On *Luzula campestris* (L.) DC. var. *multiflora* (Ehrh.) Celak.; N.S. (1), Sask. (2).
L. carolinae Wats.; N.S., Ont. (1).
L. parviflora (Ehrh.) Devs.; B.C. (1)

Puccinia obtecta Peck

II-III On *Scirpus validus* Vahl.; Ont., Sask. (1).

Puccinia obtegens (Link) Tul.

O-I-II-III On *Cirsium arvense* (L.) Scop.; N.S., Ont., Que. (1), P.E.I., Sask. (24). Collected at Comox, B.C., May, 1949. A. M. Brown.
A perennial rust cultured in garden at Winnipeg from 1940 to 1945. Originating from urediospores brought from England by the late Dr. A. H. R. Buller. Rust was lost due to road construction 1946. A.M.B.

Puccinia oenotherae Vize

O-I-II-III On *Epilobium minutum* Lindl.; B.C. (1).

Puccinia onopordi Syd.

II-III On *Onopordum acanthium* L.; N.S. (1).

Puccinia orbicula Pk. & G. W. Clint.

O-I-II-III On *Nabalus altissimus* (L.) Hook.; N.S. (1).
N. racemosus (Michx.) DC.; Sask. (2).
N. trifoliolatus Cass.; Que. (1).
Nabalus sp.; Ont. (1).

Puccinia ornata Arth. & Holw.

III On *Rumex britannica* L.; Sask. (1).
R. occidentalis S. Wats.; Man., Sask., Alta. (2).
Rumex sp.; Alta., Man. (1).

Puccinia ornatula Holw.

III On *Viola canadensis* L.; B.C. (1).
V. glabella Nutt.; B.C. (1).
V. rugulosa Greene; B.C. (1).

Puccinia ortonii Jacks.
O-I-II-III On *Dodecatheon jeffreyi* Moore; B.C. (1).
D. pauciflorum (Durand) Greene; Sask. (2).

Puccinia oxyriae Fuckel
II-III On *Oxyria digyna* (L.) Hill., Alta., B.C. (1).

Puccinia parkerae Diet. & Holw.
III On *Grossularia divaricata* (Dougl.) Cov. & Britt.; B.C. (1).
Ribes echinatum Lindl.; B.C. (1).
R. lacustre (Pers.) Poir.; Alta. (2).

Puccinia parnassiae Arth.
III On *Parnassia fimbriata* Banks; Alta., B.C. (1).

Puccinia pazschkei Diet.
P. pazschkei var. *heterisiae* (Jacks.) Savile
III On *Saxifraga mertensiana* Bong.; B.C. (34).
P. pazschkei var. *jueliana* (Diet.) Savile
III On *Saxifraga aizoides* L.; Frank. (34).
S. ferruginea Graham (*S. nootkana* Moq.); B.C. (1, 34).
P. pazschkei var. *oppositifoliae* Savile
III On *Saxifraga oppositifolia* L.; Que. (34).
P. pazschkei var. *tricuspidatae* Savile
III On *Saxifraga bronchialis* L.; B.C. (34).
S. tricuspidata Rottb. (*Leptasea t.* (Rottb.) Haw.); N.W.T. (1), Yukon, Mack., Frank., Keew. (34).

Puccinia phragmitis (Schum.) Koern.
O-I On *Rheum rhaponticum* L.; Man. (2).
Rumex mexicanus Meisn.; Man. (1).
R. occidentalis S. Wats.; Man. (2).
II-III On *Phragmites communis* Trin.; Man. (1).

Puccinia physalidis Peck
III On *Physalis heterophylla* Nees; Ont., Man. (1).
P. virginiana Mill.; Man. (1).

Puccinia pimpinellae (Strauss) Mart.
O-I-II-III On *Osmorrhiza claytoni* (Michx.) Clarke; Ont., Que. (1).
O. longistylis (Torr.) DC.; Ont. (1), Man., Sask. (2).

Puccinia poae-nemoralis Otth (*P. poae-sudeticae* (West.) Jörstad)
II-III On *Poa annua* L.; Alta. (1).
P. compressa L., B.C. (23).
P. crocata Michx.; Alta. (1).
P. interior Ryd.; Alta. (1).
P. nemoralis L.; Alta. (1).
P. palustris L.; Alta. (1), Sask. (2).
P. pratensis L.; Alta., Ont., Que., Man. (1), Sask. (2), B.C., P.E.I. (23).
Anthoxanthum odoratum L.; N.S. (1).
P. poae-sudeticae var. *airae* (Lagerh.) Arth.
II-III On *Deschampsia caespitosa* (L.) Beauv.; Alta. (1).

Puccinia poarum Niels.
O-I On *Tussilago farfara* L.; N.S. (1).

Puccinia podophylli Schw.
O-I-III On *Podophyllum peltatum* L.; Ont. (1).

Puccinia polygoni-amphibii Pers.
P. polygoni-amphibii var. *convolvuli* (Alb. & Schw.) Arth.
II-III On *Polygonum convolvulus* L.; Ont. (1), Man. (2).

P. polygoni-amphibii var. *persicariae* (Strauss) Arth.
O-I On *Geranium maculatum* L.; Ont. (1).
II-III On *Polygonum coccineum* Muhl.; Ont., Que. (1).
P. hartwrightii Gray; Alta., B.C., N.S., Man. (1), Sask. (2).
P. hydropiperoides Michx,; Ont. (1).
P. lapathifolium L.; Ont. (1).
P. muhlenbergii (Meissn.) S. Wats.; Ont., Que. (1), Man., Sask., Alta. (2).
P. pensylvanicum L.; Que. (1).
P. persicaria. L; (4).

Puccinia porphyrogenita Curt.
III On *Cornus canadensis* L.; Nfld., B.C., N S., Sask. (1), Man. (2), Que. (5), P.E.I. (6).

Puccinia porri (Sow.) Wint.
II-III On *Allium* sp.; B.C. (18).

Puccinia praegracilis Arth.
P. praegracilis var. *praegracilis*
I On *Habenaria gracilis* Wats.; B.C. (1, 29).
II-III On *Agrostis thurberiana* Hitchc.; B.C. (1).

P. praegracilis var. *connersii* (Savile) Savile
syn. *P. connersii* Savile
I On *Habenaria dilatata* (Pursh) Hook.; Que. (29).
II-III On *Deschampsia atropurpurea* (Wahl.) Scheele; Que. (29).

Puccinia pulsatillae Kalchbr.
III On *Anemone parviflora* Michx.; B.C., Que. (1).
A. patens L. var. *wolfgangiana* (Bess.) Koch; Sask. (2).
Pulsatilla ludoviciana (Nutt.) Heller; Alta., Sask. (1).
Trautvetteria grandis Nutt.; B.C. (1).

Puccinia punctata Link
O-I-II-III On *Galium asprellum* Michx.; N.S., Ont. (1).
G. trifidum L.; Man. (2).
P. punctata var. *troglodytes* (Lindr.) Arth.
II-III On *Galium triflorum* Michx.; Man. (2).

Puccinia pygmaea Erikss.
II-III On *Oryzopsis asperifolia* Michx.; Ont. (1).

Puccinia pyrolae Cooke
III On *Polygala paucifolia* Willd.; Ont. (1).

Puccinia ranunculi Blytt
III On *Ranunculus suksdorfii* Gray; B.C. (1).

Puccinia recedens Syd.
III On *Senecio willingii* Greenm.; Alta. (1).

Puccinia ribis DC.
III On *Ribes triste* Pall.; Man., Sask. (2).

Puccinia rubefaciens Johans.
III On *Galium boreale* L.; Alta. (1), Man., Sask. (2).
Puccinia rubigo-vera (DC.) Wint.
P. rubigo-vera var. *agropyri* (Erikss.) Arth.
O-I On *Thalictrum* spp.; common.
II-III On *Poaceae* common.
P. rubigo-vera var. *agropyrina* (Erikss.) Arth.
O-I On *Thalictrum* spp.; common.
II-III On *Poaceae* common
P. rubigo-vera var. *tritici* (Erikss. & Henn.) Carl.
O-I On *Thalictrum dipterocarpum* Franch. and
T. glaucum Desf.; in greenhouse at Winnipeg. A.M.B.
II-III On *Triticum* spp.; common.
Secale cereale L. Rosen rye in greenhouse at Winnipeg. A.M.B.
P. rubigo-vera var. *secalis* (Erikss.) Carl.
II-III On *Secale cereale* L.; common.
P. rubigo-vera var. *apocrypta* (Ell. & Tracy) Arth.
O-I On *Phacelia heterophylla* Pursh; B.C. (1).
P. rubigo-vera var. *impatientis* (Arth.) Mains
O-I On *Impatiens biflora* Walt.; Man., Ont., Que. (1).
I. pallida Nutt.; Ont. (1).
II-III On *Agrostis perennans* (Walt.) Tuck., N.S. (1).
Elymus virginicus L.; Ont., Que. (1).
Hordeum jubatum L.; Man. (1).
Puccinia rydbergii Garrett
III On *Sedum stenopetalum* Pursh; B.C. (1).
Puccinia scaber (Ell. & Ev.) Barth.
II-III On *Stipa viridula* Trin.; Alta. (1), Man., Sask. (2).
Puccinia scandica Johans.
III On *Epilobium* sp.; B.C. (1).
Puccinia schedonnardi Kell. & Swingle
II-III On *Muhlenbergia cuspidata* (Torr.) Rydb.; Man. (14).
Puccinia septentrionalis Juel
II-III On *Bistorta vivipara* (L.) S. F. Gray; Nfld. (1).
Puccinia sessilis Schneid.
O-I On *Convallaria* sp.; N.S. (9).
Maianthemum canadense Desf.; Man. (2).
Smilacina stellata (L.) Desf.; B.C., Ont. (1), Man., Sask. (2).
Iris versicolor L.; Que., Man. (1).
II-III On *Phalaris arundinacea* L.; Ont., Man. (1), Sask. (2).
Puccinia seymouriana Arth.
O-I On *Cephalanthus occidentalis* L.; Que. (1).
II-III On *Spartina pectinata* Link (*S. michauxiana* Hitchc.); Ont., Que. (1).
Pucciana sherardiana Koern.
O-III On *Sphaeralcea coccinea* (Nutt.) Rydb.; Alta., Sask., Man. (2).

Puccinia sorghi Schw.
II-III On *Zea mays* L.; Man., Sask. (2), P.E.I. (16), N.S., Ont., Que., N.B. (23).

Puccinia sparganioides Ellis & Barth.
O-I On *Fraxinus americanus* L., Que. (4), N.S. (19).
Fraxinus pennsylvanica Marsh. var. *lanceolata* (Borkh.) Sarg.; Que. (16), Man. (15).
II-III On *Spartina pectinata* (Link; Que. (18).

Puccinia sporoboli Arth.
O-I On *Lilium umbellatum* Pursh; Sask. (2).
Lilium sp.; Man. (10).

Puccinia stipae Arth.
O-I On *Chrysopsis hirsutissima* Greene; Sask. (2).
Solidago glaberrima Mart.; Alta. (1).
S. mollis Bartl.; Alta. (1).
Solidago sp.; Sask. (2).
Lygodesmia juncea (Pursh) D. Don; Sask., Man. (2).
II-III On *Stipa comata* Trin. & Rupr.; Alta., Man. (1), Sask. (2).
S. spartea Trin.; Man., Sask. (2).
S. tweedyi Scribn. & Vasey.; Alta. (1).

Puccinia subcircinata Ell. & Ev.
O-I-III On *Senecio triangularis* Hook.; Alta. (1).

Puccinia symphoricarpi Harkn.
III On *Symphoricarpos albus* (L.) Blake; B.C. (1).

Puccinia treleasiana Paz.
III On *Caltha leptosepala* DC.; B.C. (1).

Puccinia uliginosa Juel
I On *Parnassia palustris* L.; Man. (2).

Puccinia vagans (DC.) Arth.
P. vagans var. *epilobii-tetragoni* DC.
O-I-II-III On *Epilobium adenocaulon* Haussk.; Sask. (2).

Puccinia variabilis Grev.
O-II-III On *Taraxacum vulgare* (Lam.) Schr.; N.S. (1).

Puccinia veratri (DC.) Duby.
O-I On *Chamaenerion latifolium* (L.) Sweet; B.C. (1).
Epilobium hornemannii Reichenb.; B.C. (1).
II-III On *Veratum californicum* Durand; B.C. (1).
V. eschscholtzianum (R. & S.) Rydb.; B.C. (1).

Puccinia vexans Farl.
II-III On *Bouteloua gracilis* (H.B.K.) Lag.; Man. (2).

Puccinia vincae (DC.) Berk.
O-I-II-III On *Vinca major* L.; Ont. (1).

Puccinia violae (Schum.) DC.
O-I-II-III On *Viola adunca* J. E. Sm.; Man. (2).
V. canadensis L.; Alta., B.C. (1), Man., Sask. (2), Que. (5).
V. conspersa Riechenb.; Que. (1).
V. eriocarpa Schw.; Ont. (1).
V. nephrophylla Greene; Alta. (1), Sask. (2), Que. (4).
V. odorata L.; Man. (2), B.C. (21).

V. pedatifida G. Don.; Man., Sask. (2).
V. pubescens Ait.; Ont. (3).
V. renifolia Gray; Sask. (2).
V. septentrionalis Greene; N.S., Ont. (1).
V. sororia Willd.; Ont. (1).
V. tricolor L.; Man. (2), B.C. (23).
Viola spp., B.C.; Sask., Man., N.B., N.S. (2).

Puccinia virgaureae (DC.) Lib.
III On *Solidago puberula* Nutt.; N.S. (1).

Puccinia waldsteiniae Curt.
III On *Waldsteinia fragarioides* (Michx.) Tratt.; Ont. (1).

Puccinia windsoriae Schw.
II-III On *Triodia flava* (L.) Smyth; Ont. (1).

Puccinia xanthii Schw.
III On *Ambrosia coronopifolia* T. & G.; Man. (2).
A. trifida L.; Ont. (1), Man. (2).
Xanthium commune Britt.; Man. (2).
X. chinense Mill.; Ont. (1).

Puccinia ziziae E. & E.
III On *Zizia cordata* (Walt.) Koch; Sask. (2).

Pucciniastrum agrimoniae (Schw.) Tranz.
II-III On *Agrimonia gryposepala* Wallr.; N.S. (1), Alta., Man. (25), Que. (4).
A. pubescens Wallr.; Ont. (1).
A. striata Michx.; Alta. (1).
Agrimonia sp.; N.S. (31).

Pucciniastrum americanum (Farl.) Arth.
O-I On *Picea glauca* (Moench) Voss (*P. canadensis* (Mill.) B.S.P.); Ont. (1).
II-III On *Rubus melanolasius* Focke; B.C. (1).
R. strigosus Michx.; N.S., Ont., Que. (1).
Rubus spp.; P.E.I. (4), Que. (5), N.B. (23).

Pucciniastrum arcticum (Lagerh.) Tranz.
O-I On *Picea glauca* (Moench) Voss (*P. canadensis* (Mill.) B.S.P.); Alta., Ont. (1).
II-III On *Rubus acaulis* Michx.; Sask. (2).
R. arcticus L.; Man. (2).
R. pubescens Raf.; Man. (25).
R. triflorus Richards.; Alta., Man., N.B., Ont. (1), Sask. (2).
Rubus spp.; Ont., P.E.I. (23).

Pucciniastrum galii (Link) E. Fisch.
II-III On *Galium triflorum* Michx.; B.C. (1).

Pucciniastrum goeppertianum (Kuehn) Kleb.
O-I On *Abies balsamea* (L.) Mill.; N.S., Que., Sask. (1).
A. lasiocarpa (Hook.) Nutt.; Alta., B.C. (1).
III On *Vaccinium myrtillus* L.; Alta. (1).
V. oreophilum Rydb.; Alta. (1).
V. pennsylvanicum Lam.; N.S., Nfld. (1).
V. vitis-idaea L.; Sask. (2).
Vaccinium spp.; Ont., Man. (2), Que., N.B., N.S. (23).

Pucciniastrum myrtilli (Schum.) Arth.
O-I On *Tsuga canadensis* (L.) Carr.; N.S. (1).
II-III On *Rhodora canadensis* (L.) Torr.; N.S. (1).
Gaylussacia baccata (Wang.) K. Koch; Que. (1).
Vaccinium corymbosum L., Ont. (1).
V. myrtillus L.; Alta. (1).
V. pennsylvanicum Lam.; N.S. (1).

Pucciniastrum potentillae Kom.
II-III On *Potentilla tridentata* Ait. (*Sibbaldiopsis t.* (Ait.) Rydb.); Man. (2), N.B., Ont. (1).

Pucciniastrum pustulatum (Pers.) Diet.
O-I On *Abies amabilis* (Loud.) Forbes; B.C. (1).
A. balsamea (L.) Mill.; Alta., N.S. (1), Ont. (24).
A. lasiocarpa (Hook.) Nutt.; B.C. (1).
II-III On *Chamaenerion spicatum* (Lam.) S. F. Gray; Alta., B.C., Man., N.S., N.W.T., Sask., Nfld. (1).
Clarkia spp.; Sask., P.E.I. (23).
Epilobium adenocaulon Haussk.; Ont. (24), Man., Sask. (2), B.C. (1).
Epilobium spp.; Ont. (1), Que. (5).
Godetia spp.; Alta., Sask., Man., Ont., Que., P.E.I. (23).

Pucciniastrum pyrolae (Pers.) Schroet.
II-III On *Moneses uniflora* (L.) Gray; Alta. (1).
Pyrola asarifolia Michx.; Alta., Man. (1), Sask. (2).
P. chlorantha Sw.; Alta. (1), Man. (25).
P. elliptica Nutt.; Alta., N.S., Ont., Sask. (1).
P. rotundifolia Michx.; Man. (2).
P. secunda L.; Alta., Ont. (1).

Pucciniastrum sparsum (Wint.) E. Fisch.
II-III On *Arctostaphylos alpina* (L.) Spreng.; B.C. (1), Man. (2).
Arbutus menziesii Pursh; B.C. (6).

Tranzschelia fusca (Pers.) Diet.
O-III On *Anemone quinquefolia* L.; Ont. (1).

Tranzschelia pruni-spinosae (Pers.) Diet.
O-I On *Anemone coronaria* L.; B.C. (19).
A. quinquefolia L.; Ont., Que. (1).
Hepatica acutiloba DC.; Que. (1).
Ranunculus recurvatus Poir.; B.C. (1).
II-III On *Padus nana* (DuRoi) Roem., Ont. (1).
Prunus domestica L.; B.C. (23).

Tranzschelia suffusca (Holw.) Arth.
O-III On *Anemone patens* L., var. *wolfgangiana* (Besser) Koch; Man., Sask. (2).
Pulsatilla ludoviciana (Nutt.) Heller; Sask. (1).

Tranzschelia thalictri (Chev.) Diet.
O-III On *Thalictrum dasycarpum* Fisch. & Lall.; Man. (2).
T. polygamum Muhl.; N.S., Ont. (1).
T. venulosum Trel.; Sask. (2).
Thalictrum sp.; Que. (Collected by A. Payette, July 1949.)

Uraecium holwayi Arth.
O-I On *Tsuga heterophylla* (Raf.) Sarg.; B.C. (1).
T. mertensiana (Bong.) Carr.; B.C. (1).

Uredinopsis macrosperma (Cooke) Magn.
O-I On *Abies* sp.; B.C. (12).
II-III On *Pteridium aquilinum* (L.) Kuehn var. *pubescens* Underw.; B.C. (1).

Uredinopsis mirabilis (Peck) Magn.
O-I On *Abies balsamea* (L.) Mill.; N.S., Nfld., Ont. (1)
II-III On *Onoclea sensibilis* L.; N.S., Ont., Que. (1).

Uredinopsis osmundae Magn.
O-I On *Abies balsamea* (L.) Mill.; N.S. (1), Ont. (24).
II-III On *Osmunda claytoniana* L.; N.S. (1), Ont. (24).
O. spectabilis Willd.; N.S. (1).

Uredinopsis phegopteridis Arth.
O-I On *Abies balsamea* (L.) Mill.; N.S. (1), Ont. (24).
II-III On *Phegopteris dryopteris* (L.) Fée; Alta., N.S. (1), Ont. (24).

Uredinopsis struthiopteridis Stoermer
O-I On *Abies balsamea* (L.) Mill.; N.S. (1), Man., Sask. (2), Ont. (24).
II-III On *Athyrium cyclosorum* Rupr., N.S., Ont. (1)
Filix bulbifera (L.) Underw., Ont. (1).
Pteretis nodulosa (Michx.) Nieuwl.; Alta., N.S., Que., Nfld. (1), Man. (2).
Dryopteris thelypteris (L.) Gray; N.S., Ont. (1).

Uromyces abbreviatus Arth.
O-III On *Psoralea physodes* Dougl.; B.C. (1).

Uromyces acuminatus Arth.
II-III On *Spartina alterniflora* Loisel., N.S. (1).
S. gracilis Trin.; Alta. (1), Sask. (2).
S. pectinata Link (*S. michauxiana* Hitchc.); Man., N.S. (1), Sask. (25).

U. acuminatus var. *magnatus* (Arth.) J. J. Davis
O-I On *Maianthemum canadense* Desf.; N.S. (1), Sask. (2).
Smilacina stellata (L.) Desf.; Sask. (2).

U. acuminatus var. *polemonii* J. J. Davis
O-I On *Collomia linearis* Nutt., Sask. (2).
Phlox sp., Sask. (25).

U. acuminatus var, *spartinae* (Farl.) Arth.
O-I On *Moehringia lateriflora* (L.) Fenzl; N.S. (1).
Spergularia canadensis (Pers.) D. Don; N.S. (1).

U. acuminatus var. *steironematis* (Arth.) J. J. Davis
O-I On *Dodecatheon pauciflorum* (Durand) Greene; Sask. (1).

Uromyces alopecuri Seym.
O-I On *Ranunculus macounii* Britt.; Man. (25), Sask. (2).
R. micranthus Nutt.; Alta. (1).
R. scleratus L.; Man. (25).
II-III On *Alopecurus aristulatus* Michx.; Man., Sask. (25).
A. geniculatus L. var. *aristulatus* Torr.; Man. (2).

Uromyces amoenus Syd.
III On *Anaphalis subalpina* (Gray) Rydb.; B.C. (1).

Uromyces armeriae (Schlecht.) Lév.
U. armeriae ssp. *hudsonicus* Savile & Conners
O-I-II-III On *Armeria maritima* Willd. var. *labradorica* Wallr.,; Que. (30).
U. armeriae ssp. *pacificus* Savile & Conners
I-II-III On *Armeria maritima* Willd.; B.C. (30).

Uromyces asclepiadis (Schw.) Cooke
II-III On *Asclepias incarnata* L.; Ont. (1).
A. syriaca L.; Ont. (1).

Uromyces betae (Pers.) Lév.
II-III On *Beta vulgaris* L.; B.C. (12).

Uromyces caladii (Schw.) Farl.
O-I-II-III On *Arisaema triphyllum* (L.) Schott; N.S., Ont., Que. (1).
Muricauda dracontium (L.) Small; Ont. (1).

Uromyces caryophyllinus (Schr.) Wint.
II-III On *Dianthus caryophyllus* L.; Man. (2), Sask. (25), all provinces (23).

Uromyces coloradensis Ell. & Ev.
U. coloradensis var. *campester* Arth.
O-I-III On *Vicia americana* Muhl., Alta. (1), Man. (2).
V. cracca L.; Man. (2).
V. oregana Nutt.; Ont. (1).
V. sparsifolia Nutt.; Sask. (2).
U. coloradensis var. *maritimus* Arth.
O-I-III On *Vicia americana* Muhl.; B.C. (1).

Uromyces dactylidis Otth
O-I On *Ranunculus repens* L.; N.S. (1).
II-III On *Dactylis glomerata* L.; N.S. (23).
Poa crocata Michx.; Alta. (1).
P. pratensis L.; Alta. (1).
P. trivialis L.; N.S. (1).

Uromyces fabae (Pers.) de Bary
O-I-II-III On *Lathyrus myrtifolius* Muhl; Ont. (1).
L. ochroleucus Hook.; Alta., Ont. (1), Man., Sask. (25).
L. venosus Muhl.; Alta. (1), Sask. (25), Man. (2).
Pisum sativum L.; Man., Sask. (25), B.C., P.E.I., Que. (12), Ont., Que., N.B., N.S. (23).
Vicia americana Muhl.; Man., Alta. (25), B.C. (1).
V. angustifolia Reichard; B.C. (1).
V. cracca L.; N.S., Que. (1).
V. oregana Nutt.; Alta. (25).
V. sativa L.; B.C., Alta. (23).
V. sparsifolia Nutt.; Alta. (1).

Uromyces gentianae Arth.
II-III On *Gentiana strictiflora* (Rydb.) Nels.; Sask. (2).
Pleurogyne rotata (L.) Griesb.; Que. (1).

Uromyces geranii (DC.) Fries
O-I-II-III On *Geranium* spp.; P.E.I. (12), Ont. (23).

Uromyces glycyrrhizae (Rab.) Magn.
O-I-III On *Glycyrrhiza lepidota* Nutt.; Alta. (1), Man., Sask. (25).

Uromyces hedysari-obscuri (DC.) Car. & Picc.
O-I-II-III On *Hedysarum americanum* (Michx.) Britt.; Alta. (1).
H. boreale Nutt.; Alta. (1), Man., Sask. (2).
H. cinerascens Rydb.; Alta. (1), Sask. (2).
H. mackenzii Richards.; Alta. (1).
H. sulphurascens Rydb.; Alta. (1).

Uromyces hedysari-paniculati (Schw.) Farl.
O-I-II-III On *Desmodium dillenii* Darl.; Ont. (1).

Uromyces heterodermus Syd.
O-III On *Erythronuim grandiflorum* Pursh; B.C. (1).

Uromyces holwayi Lagerh.
O-I-II-III On *Lilium canadense* L.; Ont. (1).
L. columbianum Hanson; B.C. (1).
L. michiganense Farwell; Ont. (1).

Uromyces houstoniatus (Schw.) Sheldon
O-I On *Houstonia longifolia* Gaertn.; Sask. (1).

Uromyces hyperici (Spreng.) Curt.
O-I-II-III On *Hypericum kalmianum* L.; Ont. (1).
H. perforatum L.; Man. (2).
H. prolificum L.; Ont. (1).
H. virginicum L.; (*Triadenum v.* (L.) Raf.); N.S., Ont., Que. (1).

Uromyces intricatus Cooke
O-I-III On *Eriogonum flavum* Nutt.; Sask. (2).

Uromyces junci (Desm.) L. Tul.
O-I On *Aster* spp.; Sask., Ont. (1).
Helianthus petiolaris Nutt.; Man., Sask. (25).
H. subrhomboideus Rydb.; Sask. (2).
H. subtuberosus Bourg.; Alta. (1).
H. tuberosus L.; Man. (1).
Cirsium flodmanii (Rydb.) Arth.; Man. (1), Sask. (2).
C. megacephalum (Gray) Cockerell; Sask. (2).
C. undulatum (Nutt.) Spreng.; Alta. (1), Sask. (25).
Arnica chamissonis Less.; Alta. (1).
II-III On *Juncus ater* Rydb.; Alta. (1), Sask. (25).
J. balticus Willd.; Man., Sask. (25).
J. dudleyi Wieg.; Man. (25).
J. filiformis L.; Sask. (25).

Uromyces junci-effusi Syd.
II-III On *Juncus filiformis* L.; N.S. (1).
J. xiphioides E. Mey.; B.C. (1).

Uromyces lapponicus Lagerh.
O-I-III On *Astragalus macounii* Rydb.; Alta. (1).
Astragalus sp.; Alta. (1).
Phaca frigida L.; N.W.T. (1).

Uromyces lespedezae-procumbentis (Schw.) Curt.
O-I-II-III On *Lespedeza capitata* Michx.; Ont. (1).

Uromyces limonii (DC.) Lév.
O-I-II-III On *Limonium latifolium*; B.C. (30).
L. vulgare; Ont. (30).

Uromyces limonii-caroliniani Savile & Conners
O-I-II-III On *Limonium nashii* Small (not *L. carolinianum* (Walt.) Britt.); Que., N.B., N.S. (30).

Uromyces lupini Berk. & Curt.
O-I-II-III On *Lupinus* sp.; B.C. (13).

Uromyces minor Schroet.
I-III On *Trifolium dubium* Sibth.; B.C. (18).
T. microdon H. & A.; B.C. (1).
T. oliganthum Steud.; B.C. (1).

Uromyces miurae Syd.
III On *Fritillaria kamtschatcensis* Ker.; B.C. (1).

Uromyces nerviphilus (Grognot) Hotson
O-I-III On *Trifolium hybridum* L.; Sask. (2).
T. pratense L.; Ont. (23).
T. repens L.; Ont. (1). Man. (2).

Uromyces peckianus Farl.
O-I On *Atriplex patula* L.; N.S. (1).
Chenopodium album L.; N.S. (1).
Salicornia herbacea L.; N.S. (1).
S. pacifica Standl.; B.C. (1).
Suaeda maritima (L.) Dumort; N.S. (1).
Plantago eriopoda Torr.; Alta. (1).
II-III On *Distichlis spicata* (L.) Greene; B.C., N.S. (1).

Uromyces perigynius Halst.
II-III On *Rudbeckia ampla* A. Nels.; Man. (6).
O-I On *R. laciniata* L.; Man. (1).

Uromyces phaseoli (Pers.) Wint.
O-I-II-III On *Phaseolus vulgaris* L.; Ont. (1), B.C. (13), P.E.I. (12), N.B. (19), Que., N.S. (23).

Uromyces plumbarius Peck
O-I-II-III On *Gaura coccinea* Nutt.; Alta. (1), Sask. (25), Man. (2).

Uromyces polygoni (Pers.) Fckl.
O-I-II-III On *Polygonum aviculare* L.; Ont., Que. (1), Alta. (6), P.E.I. (4), Man. (2).
P. buxiforme Small; Sask. (2).
P. erectum L.; Man. (2).
P. fowleri Rob.; Nfld. (1).
P. ramosissimum Michx.; Man. (2).
P. rubescens Small; Sask. (2).
P. spergulariaeforme Meissn.; B.C. (1).

Uromyces proëminens (DC.) Pass.
U. proëminens var. *euphorbiicola* (Tranz.) Arth.
O-I-II-III On *Chamaesyce humistrata* (Engelm.) Small; Ont. (1).

U. proeminens var. *proëminens*
O-I-II-III On *Chamaesyce* glyptosperma (Engelm.) Small; Sask. (25).
C. hirsuta (Torr.) Arth.; Ont. (1).
C. serphyllifolia (Pers.) Small; B.C. (1), Man. (25).

Uromyces psoraleae Peck
U. psoraleae var. *argophyllae* (Seym.) Arth.
O-I-III On *Psoralea argophylla* Pursh; Sask. (2).
U. psoraleae var. *psoraleae*
O-I-III On *Psoralea lanceolata* Pursh; Sask. (2).

Uromyces punctatus Schroet.
II-III On *Oxytropis gracilis* (A. Nels.) K. Schum.; Man. (2).

Uromyces pyriformis Cooke
(See note under *U. sparganii*)
II-III On *Acorus calamus* L.; Ont. (1).

Uromyces rhyncosporae Ellis
II-III On *Rhynchospora alba* (L.) Vahl; Ont. (1).

Uromyces rudbeckiae Arth. & Bisby
III On *Rudbeckia laciniata* L.; Man. (2), Ont. (1).

Uromyces scirpi (Cast.) Burr.
O-I On *Cicuta occidentalis* Greene; Sask. (2).
Sium cicutaefolium Schrank; Man., Sask. (2).
II-III On *Scirpus fluviatilis* (Torr.) Gray; Que. (1).
S. paludosus Nels.; N.S. (1), Sask. (2).
S. validus Vahl; N.S., Ont. (1).

(According to G.B. Cummins (Mycologia 27: 611. 1935) the rust on *Scirpus validus* is *U. americanus* Speg., not *U. scirpi*).

Uromyces silphii (Burr.) Arth.
II-III On *Juncus longistylis* Torr.; Man. (1), Sask. (2).
J. macer S. F. Gray; Sask. (2), Ont. (1).

Uromyces sparganii Cooke & Peck
II-III On *Sparganium eurycarpum* Englem.; Ont., Que. (1).

(J. A. Parmelee and D. B. O. Savile (Mycologia 46: 823-826. 1954) report that *U. pyriformis* on *Acorus calamus* is indistinguishable from *U. sparganii* ssp. *sparganii* and have demonstrated that the O-I states, which were found in Ont. and Que., occur on *Hypericum virginicum*. The II-III states were also reported on *A. calamus* in Que., N.S., and on *S. eurycarpum* in N.S.).

Uromyces spragueae Hark.
I-III On *Lewisia rediviva* Pursh; B.C. (5).

(D. B. O. Savile and J. A. Parmelee (Mycologia 1956, in press) have placed the rust on *L. rediviva* in B.C. in *U. unitus* Peck ssp. *unitus*).

Uromyces striatus Schroet.
O-I On *Euphorbia cyparissias* L.; Ont. (18).
II-III On *Medicago lupulina* L.; Ont. (1).
M. sativa L.; Man. (2), Sask. (18), Ont., N.S., P.E.I. (23).

Uromyces trifolii (Hedw. f.) Lév.

U. trifolii var. *trifolii-repentis* (Liro) Arth.

O-I-II-III On *Trifolium repens* L.; Nfld., Man. (1), Alta. (2), P.E.I. (12), B.C., Sask., Ont., Que. (23).

T. incarnatum L.; P.E.I. (23).

U. trifolii var. *hybridi* (W. H. Davis) Arth.

O-I-II-III On *Trifolium hybridum* L.; Ont. (1), Man., Sask., Alta. (2), All provinces (23).

U. trifolii var. *fallens* (Desm.) Arth.

O-I-II-III On *Trifolium medium* L.; Man. (2).

T. pratense L.; Man., B.C., Ont., Que., N.S. (1), N.B., P.E.I. (23).

Uromyces zygadeni Arth.

O-I-II-III On *Zygadenus gramineus* Rydb.; Alta. (1).

Uropyxis amorphae (Curt.) Schroet.

II-III On *Amorpha canescens* Pursh.; Man. (2).

A. fruticosa L.; Man. (25).

A. nana Nutt.; Man. (2).

Uropyxis petalostemonis (Farl.) de Toni

O-I-II-III On *Petalostemon oligophyllus* (Torr.) Rydb.; Sask. (2).

A LIST OF HOSTS AND THE RUSTS THAT MAY BE EXPECTED TO OCCUR ON THEM

Abies amabilis (Loud.) Forbes
- Pucciniastrum pustulatum

Abies balsamea (L.) Mill.
- Hyalopsora aspidiotus
- Melampsora abieti-capraearum
- Melampsorella cerastii
- Milesia fructuosa
- M. marginalis
- M. polypodophila
- Pucciniastrum goeppertianum
- P. pustulatum
- Uredinopsis macrosperma
- U. mirabilis
- U. osmundae
- U. phegopteridis
- U. struthiopteridis

Abies grandis Lindl.
- Melampsorella cerastii

Abies lasiocarpa (Hook.) Nutt.
- Melampsorella cerastii
- Pucciniastrum pustulatum
- P. goeppertianum

Abies sp.
- Uredinopsis macrosperma

Achillea millefolium L.
- Puccinia millefolii

Achillea multiflora Hook.
- Puccinia millefolii

Achillea ptarmica L.
- Pucccinia millefolii

Acorus calamus L.
- Uromyces pyriformis

Actaea alba (L.) Mill.
- Puccinia rubigo-vera var. agropyri

Actaea brachypoda Ell.
- Puccinia rubigo-vera var. agropyrina

Actaea rubra (Ait.) Willd.
- Puccinia rubigo-vera var. agropyri

Adoxa moschatellina L.
- Puccinia argentata

Adoxa sp.
- Puccinia adoxae

Aegilops cylindrica Host, cult.
- Puccinia glumarum

Aegilops sp., cult.
- Puccinia glumarum
- P. rubigo-vera var. tritici

Agoseris glauca (Pursh) Raf.
- Puccinia extensicola var. hieraciata
- P. hieracii
- P. maculosa

Agrimonia gryposepala Wallr.
- Pucciniastrum agrimoniae

Agrimonia pubescens Wallr.
- Pucciniastrum agrimoniae

Agrimonia striata Michx.
- Pucciniastrum agrimoniae

Agrimonia sp.
- Pucciniastrum agrimoniae

Agropyron albicans Scribn. & Sm.
- Puccinia montanensis
- P. rubigo-vera var. agropyrina

Agropyron cristatum (L.) Gaertn., cult.
- Puccinia glumarum
- P. graminis

Agropyron dasystachyum (Hook.) Scribn.
- Puccinia glumarum
- P. graminis
- P. montanensis
- P. rubigo-vera var. agropyri

Agropyron desertorum Schult.
- Puccinia glumarum

Agropyron elongatum Host
- Puccinia glumarum

Agropyron griffithsii Scribn. & Sm.
- Puccinia glumarum
- P. graminis

Agropyron obtusiusculum Lange
- Puccinia glumarum

Agropyron repens (L.) Beauv.
- Puccinia coronata
- P. glumarum.
- P. graminis
- P. montanensis
- P. rubigo-vera var. agropyrina

Agropyron richardsonii (Trin.) Schrad.
- Puccinia graminis
- P. glumarum
- P. montanensis
- P. rubigo-vera var. agropyrina

Agropyron smithii Rydb.
- Puccinia coronata
- P. graminis
- P. glumarum
- P. montanensis
- P. rubigo-vera var. agropyri

Agropyron spicatum (Pursh) Scribn. & Sm.
- Puccinia glumarum
- P. rubigo-vera var. agropyri

Agropyron trachycaulum (Lk.) Malte (A. tenerum Vasey)
- Puccinia coronata
- P. glumarum
- P. graminis
- P. montanensis
- P. rubigo-vera var. agropyri
- P. rubigo-vera var. agropyrina

Agropyron violaceum (Hornem.) Lange
- Puccinia rubigo-vera var. agropyri

Agrostis exarata Trin.
- Puccinia ?praegracilis

Agrostis hyemalis (Walt.) B.S.P.
Puccinia graminis
P. liatridis
Agrostis palustris Huds.
Puccinia graminis
Agrostis perennans (Walt.) Tuckerm.
Puccinia graminis
P. rubigo-vera var. impatientis
Agrostis stolonifera L.
Puccinia graminis
Agrostis tenuis Sibth.
Puccinia graminis
Agrostis thurberiana Hitchc.
Puccinia praegracilis var. praegracilis
Allium cernuum Roth
Puccinia granulispora
Allium textile Nels. & Macbr.
Puccinia blasdalei
Allium sp.
Puccinia granulispora
P. porri
Alopecurus aristulatus Michx.
Uromyces alopecuri
Alopecurus geniculatus L. var. aristulatus Torr.
Uromyces alopecuri
Alopecurus pratensis L.
Puccinia graminis
P. rubigo-vera var. agropyrina
Althaea ficifolia (L.) Cav.
Puccinia malvacearum
Althae rosea (L.) Cav.
Puccinia malvacearum
Ambrosia psilostachya DC. (A. coronopifolia T. & G.)
Puccinia xanthii
Ambrosia trifida L.
Puccinia xanthii
Amelanchier alnifolia Nutt.
Gymnosporangium clavariaeforme
G. clavipes
G. corniculans
G. juvenescens
G. nelsoni
Amelanchier canadensis (L.) Medic.
Gymnosporangium clavariaeforme
Amelanchier intermedia Spach
Gymnosporangium clavipes
G. nidus-avis
Amelanchier florida Lindl.
Gymnosporangium juvenescens
Amelanchier oligocarpa (Michx.) Roem.
Gymnosporangium clavipes
Amelanchier pumila Nutt.
Gymnosporangium juvenescens
Amelanchier sanguinea (Pursh) DC.
Gymnosporangium corniculans
G. clavipes
Amelanchier spicata
Gymnosporangium clavariaeforme
Amelanchier spp.
Gymnosporangium clavipes
Amorpha canescens Pursh
Uropyxis amorphae
Amorpha fruticosa L.
Uropyxis amorphae
Amorpha nana Nutt.
Uropyxis amorphae
Anaphalis subalpina (Gray) Rydb.
Uromyces amoenus
Andropogon provincialis Lam.
Puccinia andropogonis var. pustulata
P. ellisiana
Andropogon scoparius Michx.
Puccinia andropogonis var. pustulata
P. ellisiana
Anemone canadensis L.
Puccinia anomones-virginianae
P. magnusiana
Anemone coronaria L.
Tranzschelia pruni-spinosae
Anemone cylindrica Gray
Puccinia gigantispora
P. rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
Anemone globosa Nutt.
Puccinia gigantispora
P. rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
Anemone husdoniana Richards.
Puccinia rubigo-vera var. agropyrina
Anemone parviflora Michx.
Puccinia pulsatillae
Anemone patens L. var. wolfgangiana (Besser) Koch
Puccinia pulsatillae
Tranzschelia suffusca
Anemone quinquefolia L.
Puccinia rubigo-vera var. agropyrina
Tranzschelia fusca
T. pruni-spinosae
Anemone riparia Fern.
Puccinia anemones-virginianae
P. rubigo-vera var. agropyrina
Anemone virginiana L.
Puccinia anemones-virginianae
P. rubigo-vera var. agropyri
Anthoxanthum odoratum L.
Puccinia poae-nemoralis
Antirrhinum majus L., cult.
Puccinia antirrhini
Apargia autumnalis (L.) Hoffm.
Puccinia hieracii
Aquilegia flavescens Wats.
Puccinia rubigo-vera var. agropyri
Aquilegia formosa Fisch.
Puccinia rubigo-vera var. agropyri
Arabis brachycarpa (Torr. & Gray) Britt.
Puccinia monoica
Arabis divaricarpa Nels.
Puccinia holboellii
Arabis drummondii Gray
Puccinia holboellii
P. monoica

Arabis lignipes Nels.
Puccinia holboellii
Arabis lyallii Wats.
Puccinia holboellii
Arabis lyrata L.
Puccinia monoica
Arabis nuttallii B. L. Rob.
Puccinia monoica
Arabis ovata (Pursch) Poir.
Puccinia monoica
Arabis retrofracta Grah.
Puccinia monoica
Arabis sp.
Puccinia monoica
Aralia nudicaulis L.
Nyssopsora clavellosa
Arbutus menziesii Pursh
Pucciniastrum sparsum
Arctium minus Schk.
Puccinia bardanae
Arctostaphylos alpina (L.) Spreng.
Pucciniastrum sparsum
Arctostaphylos uva-ursi (L.) Spreng.
Chrysomyxa arctostaphyli
Arisaema triphyllum (L.) Schott.
Uromyces caladii
Armeria maritima Willd., cult.
Uromyces armeriae ssp. pacificus
Armeria maritima Willd. var. labradorica Wallr.
Uromyces armeriae ssp. hudsonicus
Arnica chamissonis Less.
Uromyces junci
Aronia arbutifolia (L.) Ell.
Gymnosporangium clavipes
Aronia melanocarpa (Michx.) Ell.
Gymnosporangium clavipes
Artemisia biennis Willd.
Puccinia atrofusca
Artemisia camporum Rydb.
Puccinia atrofusca
Artemisia cana Pursh
Puccinia absinthii
Artemisia caudata Michx.
Puccinia atrofusca
Artemisia frigida Willd.
Puccinia absinthii
P. atrofusca
P. millefolii
Artemisia glauca Pallas
Puccinia atrofusca
Artemisia gnaphalodes Nutt.
Puccinia absinthii
P. atrofusca
Artemisia ludoviciana Nutt.
Puccinia absinthii
Artemisia purshiana Besser
Puccinia atrofusca
Asarum caudatum Lindl.
Puccinia asarina
Asclepias incarnata L.
Uromyces asclepiadis
Asclepias syriaca L.
Uromyces asclepiadis
Asparagus officinalis L., cult.
Puccinia asparagi
Aster conspicuus Lindl.
Coleosporium solidaginis
Aster cordifolius L.
Coleosporium solidaginis
Puccinia asteris
Aster ericoides L.
Coleosporium solidaginis
Puccinia asteris
Aster junceus Ait.
Coleosporium solidaginis
Aster laevis L.
Coleosporium solidaginis
Puccinia asteris
Aster lateriflorus (L.) Britt.
Coleosporium solidaginis
Aster lindleyanus Torr. & Gray
Coleosporium solidaginis
Puccinia asteris
Aster novae-angliae L.
Coleosporium solidaginis
Puccinia asteris
Aster occidentalis Nutt.
Coleosporium solidaginis
Aster paniculatus Lam.
Coleosporium solidaginis
Aster salicifolius Lam.
Coleosporium solidaginis
Aster umbellatus Mill.
Coleosporium solidaginis
Aster spp.
Puccinia extensicola var. asteris
Uromyces junci
Astragalus macounii Rydb.
Uromyces lapponicus
Astralagus sp.
Uromyces lapponicus
Athyrium cyclosorum Rupr.
Uredinopsis struthiopteridis
Atriplex patula L.
Uromyces peckianus
Avena fatua L.
Puccinia coronata
P. graminis
Avena nuda L.
Puccinia graminis
Avena sativa L., cult.
Puccinia coronata
P. graminis
Balsamorrhiza sagittata (Pursh) Nutt.
Puccinia balsamorhizae
Beckmannia erucaeformis (L.) Host.
Puccinia coronata
Beckmannia syzigachne (Steud.) Fern.
Puccinia coronata
P. graminis
Berberis aquifolium Pursh (Mahonia a. (Pursh) Nutt.), cult.
Puccinia graminis

Berberis vulgaris L., cult. and escaped
Puccinia graminis
Berberis spp.
Puccinia graminis
Beta vulgaris L.
Uromyces betae
Betula populifolia Marsh.
Melampsoridium betulinum
Betula pumila L.
Melampsoridium betulinum
Betula sp.
Melampsoridium betulinum
Bistorta vivipara (L.) S. F. Gray
Puccinia bistortae
P. septentrionalis
Bouteloua gracilis (H.B.K.) Lag.
Puccinia vexans
Briza maxima L.
Puccinia graminis
Briza minor L.
Puccinia graminis
Bromus carinatus Thurb.
Puccinia glumarum
Bromus carinatus hookerianus (Thurb.) Shear
Puccinia rubigo-vera var. agropyri
Bromus ciliatus L.
Puccinia coronata
P. glumarum
P. rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
Bromus ciliatus laeviglumis Scribn.
Puccinia rubigo-vera var. agropyrina
Bromus hordeaceus L.
Puccinia graminis
Bromus latiglumis (Shear) Hitchc.
Puccinia coronata
P. rubigo-vera var. agropyrina
Bromus marginatus Nees.
Puccinia glumarum
Bromus porteri (Coulter) Nash
Puccinia coronata
P. rubigo-vera var. agropyri
Bromus pumpellianus Scribn.
Puccinia coronata
P. graminis
P. rubigo-vera var. agropyri
Bromus purgans L.
Puccinia rubigo-vera var. agropyrina
Bromus sitchensis Trin., cult.
Puccinia glumarum
Bromus spp.
Puccinia glumarum

Calamagrostis canadensis (Michx.) Beauv.
Puccinia coronata
Calamagrostis elongata (Kearney) Rydb.
Puccinia coronata
Calamagrostis montanensis Scribn.
Puccinia coronata
Calamagrostis rubescens Buckl.
Puccinia coronata
Calamovilfa longifolia (Hook.) Hack.
Puccinia amphigena
Callistephus chinensis Nees, cult.
Coleosporium solidaginis
Caltha leptosepala DC.
Puccinia areolata
P. treleasiana
Caltha palustris L.
Puccinia calthae
P. calthaecola
Campanula persicifolia L.
Coleosporium campanulae
Campanula rapunculoides L.
Coleosporium campanulae
Campanula rotundifolia L., var. intercedens Witasek
Puccinia campanulae
Campanula spp.
Coleosporium campanulae
Cardamine bellidifolia L.
Puccinia cruciferarum
Cardamine douglasii (Torr.) Britt.
Puccinia arabicola
Carex aquatilis Wahl.
Puccinia caricis-shepherdiae
Carex atherodes Spreng.
Puccinia caricis-shepherdiae
Carex douglasii Boott
Puccinia atrofusca
Carex eburnea Boott
Puccinia caricis-shepherdiae
Carex eleocharis Bailey
Puccinia atrofusca
Carex filifolia Nutt.
Puccinia atrofusca
Carex intumescens Rudge
Puccinia bolleyana
Carex lanuginosa Michx.
Puccinia caricis-shepherdiae
Carex lasiocarpa Ehrh.
Puccinia minutissima
Carex limosa L.
Puccinia limosae
Carex lupuliformis Sartw.
Puccinia bolleyana
Carex paupercula Michx.
Puccinia karelica
Carex praegracilis Boott
Puccinia atrofusca
Carex rossii Boott
Pucinia atrofusca
Carex sartwellii Dewey
Puccinia extensicola var. oenotherae
Carex scoparia Schk.
Puccinia extensicola var. euthamii
Carex sprengelii Dewey
Puccinia extensicola var. hieraciata
P. extensicola var. phrymae
Carex stratiformis Britt.
Puccinia limosae
Carex substricta (Kuek.) Mack.
Puccinia caricis-shepherdiae
P. minutissima

Carex vesicaria L.
Puccinia caricus var. urticata
P. caricis-shepherdiae
Carex spp.
Puccinia caricis var. grossulariata
P. caricis var. uniporula
P. caricis var. urticata
P. extensicola var. asteris
P. extensicola var. hieraciata
P. extensicola var. solidaginis
P. extensicola var. erigerontis
Carthamus tinctorius L.
Puccinia carthami
Castilleja sessiliflora Pursh
Puccinia andropogonis var. micropuncta
Centaurea cyanus L.
Puccinia cyani
Cephalanthus occidentalis L.
Puccinia seymouriana
Cerastium alpinum L.
Melampsorella cerastii
Cerastium arvense L.
Melampsorella cerastii
Cerastium berringianum C. & S.
Melampsorella cerastii
Cerastium vulgatum L.
Melampsorella cerastii
Chamaedaphne calyculata (L.) Moench
Chrysomyxa cassandrae
C. ledi var. cassandrae
Chamaenerion latifolium (L.) Sweet
Puccinia veratri
Chamaenerion spicatum (Lam.) S. F. Gray
Pucciniastrum pustulatum
Puccinia extensicola var. oenotherae
P. gigantea
Chamaesyce glyptosperma (Engelm.) Small
Uromyces proëminens var. proëminens
Chamaesyce hirsuta (Torr.) Arth.
Uromyces proëminens var. proëminens
Chamaesyce humistrata (Englem.) Small
Uromyces proëminens var. euphorbiicola
Chamaesyce serphyllifolia (Pers.) Small
Uromyces proëminens var. proëminens
Chenopodium album L.
Puccinia aristidae
Uromyces peckianus
Cheirinia cheiranthoides (L.) Link
Puccinia aristidae
Chiogenes hispidula (L.) T. & G.
Chrysomyxa chiogenis
Chrysopsis hirsutissima Greene
Puccinia stipae
Cichorium intybus L.
Puccinia hieracii
Cicuta maculata L.
Puccinia cicutae
Cicuta occidentalis Greene
Puccinia cicutae
Uromyces scirpi
Cinna arundinacea L.
Puccinia graminis
Cinna latifolia (Trev.) Gries.
Puccinia graminis
Circaea alpina L.
Puccinia circaeae
Circaea latifolia Mill.
Puccinia circaeae
Circaee pacifica Asch. & Magn.
Puccinia circaeae
Cirsium arvense (L.) Scop.
Puccinia suaveolens (P. obtegens)
Cirsium flodmanii (Rydb.) Arth.
Puccinia cirsii
Uromyces junci
Cirsium lanceolatum (L.) Hill
Puccini cnici
Cirsium megacephalum (Gray) Cockerell
Uromyces junci
Cirsium undulatum (Nutt.) Spreng.
Puccinia cirsii
Uromyces junci
Cirsium spp.
Puccinia cirsii
Clarkia spp.
Pucciniastrum pustulatum
Claytonia caroliniana Michx.
Puccinia mariae-wilsoni
Claytonia virginica L.
Puccinia mariae-wilsoni
Clematis ligusticifolia Nutt.
Puccinia rubigo-vera var. agropyri
Clinopodium vulgare L.
Puccinia menthae
Clintonia borealis (Ait.) Raf.
Puccinia mesomajalis
Clintonia uniflora (Schult.) Kunth
Puccinia mesomajalis
Collomia linearis Nutt.
Uromyces acuminatus var. polemonii
Comandra livida Richards.
Cronartium comandrae
Puccinia comandrae
Comandra pallida A. DC.
Cronartium comandrae
Puccinia andropogonis var. pustulata
P. comandrae
Comandra umbellata (L.) Nutt.
Cronartium comandrae
Puccinia andropogonis var. pustulata
Convallaria sp.
Puccinia sessilis
Convolvulus sepium L.
Puccinia convolvuli
Cornus canadensis L.
Puccinia porphyrogenita
Cotoneaster lucida
Gymnosporangium clavipes
Crataegus chrysocarpa Ashe
Gymnosporangium betheli
G. clavariaeforme
Crataegus coccinea L.
Gymnosporangium globosum
Crataegus douglasii Lindl.
Gymnosporangium betheli

Crataegus punctata Jacq.
Gymnosporangium clavipes
G. globosum
Crataegus tomentosa L.
Gymnosporangium globosum
Crataegus spp.
Gymnosporangium clavariaeforme
G. clavipes
G. globosum
G. tubulatum
G. betheli
Crepis runcinata (James) Torr. & Gray
Puccinia hieracii
Cryptogramma acrostichoides R. Br.
Milesia darkeri
Cryptotaenia canadensis (L.) DC.
Puccinia cryptotaeniae
P. microica
Cydonia olbonga Mill.
Gymnosporangium clavariaeforme
G. clavipes
Cydonia sp.
Gymnosporangium clavipes
Cyperus strigosus L.
Puccinia canaliculata
Cypripedium parviflorum Salisb.
Puccinia cypripedii

Dactylis glomorata L.
Puccinia graminis
Uromyces dactylidis
Dasiphora fruticosa (L.) Rydb. (Potentilla f. L.)
Phragmidium andersoni
Decodon verticillatus (L.) Ell.
Puccinia minutissima
Deschampsia atropurpurea (Wahl.) Scheele
P. praegracilis var. connersii
Deschampia caespitosa (L.) Beauv.
Puccinia coronata
P. graminis
P. poae-sudeticae var. airae
Desmodium dillenii Darl.
Uromyces hedysari-paniculati
Dianthus caryophyllus L., cult.
Uromyces caryophyllinus
Distichlis spicata (L.) Greene
Puccinia aristidae
Uromyces peckianus
Dodecatheon jeffreyi Moore
Puccinia ortonii
Dodecatheon pauciflorum (Durand) Greene
Puccinia ortonii
Uromyces acuminatus var. steironematis
Draba arabisans Michx.
Puccinia drabae
Draba incerta Payson
Puccinia drabae
Draba lutea Gilib.
Puccinia aristidae
Draba sp.
Puccinia drabae

Dryopteris marginalis (L.) Gray
Milesia marginalis
Dryopteris spinulosa (O. F. Muell.) Watt.
Milesia fructuosa
Dryopteris thelypteris (L.) Gray
Uredinopsis struthiopteridis

Elaeagnus angustifolia L.
Puccinia caricis-shepherdiae
Elaeagnus commutata Bernh.
Puccinia caricis-shepherdiae
P. coronata
Eleocharis palustris (L.) R. & S.
Puccinia eleocharidis
Eleocharis spp.
Puccinia eleocharidis
Elymus canadensis L.
Puccinia coronata
P. graminis
P. montanensis
P. rubigo-vera var. impatientis
Elymus curvatus Piper
Puccinia graminis
P. montanensis
P. rubigo-vera var. agropyrina
Elymus dahuricus Turcz.
Puccinia graminis
P. montanensis
Elymus diversiglumis Scribn. & Ball
Puccinia rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
Elymus glaucus Buckl.
Puccinia glumarum
Elymus howellii Scribn. & Merr.
Puccinia glumarum
Elymus innovatus Beal
Puccinia coronata
Elymus jejunus (Ramaley) Rydb.
Puccinia montanensis
P. rubigo-vera var. agropyrina
Elymus macounii Vasey
Puccinia graminis
P. rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
Elymus marginalis Rydb.
Puccinia glumarum
Elymus vancouverensis Vasey
Puccinia rubigo-vera var. agropyri
Elymus virginicus L.
Puccinia graminis
P. rubigo-vera var. agropyrina
P. rubigo-vera var. impatientis
Empetrum atropurpureum Fern. & Wieg.
Chrysomyxa empetri
Empetrum eamesii Fern. & Wieg.
Chrysomyxa empetri
Empetrum nigrum L.
Chrysomyxa empetri
Epilobium adenocaulon Haussk.
Puccinia vagans var. epilobii-tetragoni
Pucciniastrum pustulatum
Epilobium alpinum L.
Puccinia epilobii

Epilobium angustifolium L.
(Chamaenerion spicatum (Lam.) S.F. Gray)
Puccinia extensicola var. oenotherae
Pucciniastrum pustulatum
Epilobium coloratum Muhl.
Pucciniastrum pustulatum
Epilobium hirsutum L.
Pucciniastrum pustulatum
Epilobium hornemannii Reichenb.
Puccinia veratri
Epilobium minutum Lindl.
Puccinia oenotherae
Epilobium spp.
Puccinia epilobii
P. scandica
Pucciniastrum pustulatum
Puccinia vagans var. epilobii-tetragoni
Erigenia bulbosa (Michx.) Nutt.
Puccinia erigeniae
Eriogonum flavum Nutt.
Uromyces intricatus
Eriophorum angustifolium Roth
Puccinia angustata
Eriophorum viridicarinatum (Engelm.) Fern.
Puccinia angustata
Erysimum cheiranthoides L. (Cheirinia c. (L.) T. & G.)
Puccinia aristidae
Erythronium grandiflorum Pursh
Uromyces heterodermus
Eupatorium perfoliatum L.
Puccinia eleocharidis
Eupatorium purpureum L.
Puccinia eleocharidis
Eupatorium purpureum var. maculatum (L.) Darl.
Puccinia eleocharidis
Euphorbia cyparissias L.
Uromyces striatus
Euthamia graminifolia (L.) Nutt. (Solidago g. (L.) Salish.)
Puccinia extensicola var. euthamii

Festuca elatior L.
Puccinia graminis
Festuca myuros L.
Puccinia graminis
Festuca ovina L.
Puccinia crandallii
Festuca rubra L.
Puccinia rubigo-vera var. agropyri
Festuca saximontana Rydb.
Puccinia crandallii
Festuca scabrella Torr.
Puccinia cockerelliana
Festuca spp.
Puccinia coronata
Filix bulbifera (L.) Underw.
Uredinopsis struthiopteridis
Filix fragilis (L.) Gilib.
Hyalopsora polypodii

Fluminia festucacea (Willd.) Hitchc.
(Scolochloa festucacea (Willd.) Link)
Puccinia coronata
Fraxinus americana L.
Puccinia sparganioides
Fraxinus pennsylvanica Marsh. var. lanceolata (Borkh.) Sarg.
Puccinia sparganioides
Fritillaria kamtschatcensis Ker.
Uromyces miurae

Galium aparine L.
Puccinia difformis
Galium asprellum Michx.
Puccinia punctata
Galium boreale L.
Puccinia rubefaciens
Galium trifidum L.
Puccinia punctata
Galium triflorum Michx.
Pucciniastrum galii
Puccinia punctata var. troglodytes
Gaylussacia baccata (Wang.) K. Koch
Pucciniastrum myrtilli
Gaura coccinea Nutt.
Uromyces plumbarius
Gentiana affinis Griesb.
Puccinia gentianae
Gentiana amarella L. var. acuta (Michx.) Herder
Puccinia haleniae
Gentiana andrewsii Gries.
Puccinia gentianae
Gentiana interrupta Greene
Puccinia gentianae
Gentiana strictiflora (Rydb.) A Nels.
Uromyces gentianae
Geranium maculatum L.
Puccinia polygoni-amphibii var. persicariae
Geranium spp.
Uromyces geranii
Gilia linearis (Nutt.) Gray
Uromyces acuminatus var. polemonii
Glaux maritima L.
Puccinia aristidae
P. distichlidis
Glyceria grandis Wats.
Puccinia graminis
P. rubigo-vera var. agropyrina
Glycyrrhiza lepidota Nutt.
Uromyces glycyrrhizae
Gnaphalium macounii Greene
Puccinia investita
Godetia spp.
Pucciniastrum pustulatum
Grindelia perennis Nels.
Puccinia grindeliae
Grindelia squarrosa (Pursh) Dunal
Puccinia grindeliae

Grossularia cynosbati (L.) Mill.
Cronartium ribicola
Puccinia caricis var. grossulariata
P. caricis var. uniporula
Grossularia divaricata (Dougl.) Cov. & Britt.
Cronartium ribicola
Melampsora ribesii-purpureae
Puccinia parkerae
Grossularia hirtella (Michx). Spach
Puccinia caricis var. grossulariata
Grossularia setosa (Lindl.) Cov. & Britt.
Puccinia caricis var. grossulariata

Habenaria dilatata (Pursh) Hook.
Puccinia praegracilis var. connersii
Habenaria gracilis Wats.
Aecidium graebnerianum
Puccinia praegracilis var. praegracilis
Habenaria psycodes (L.) Sw.
Aecidium graebnerianum
Hedysarum americanum (Michx.) Britt.
Uromyces hedysari-obscuri
Hedysarum boreale Nutt.
Uromyces hedysari-obscuri
Hedysarum cinerascens Rydb.
Uromyces hedysari-obscuri
Hedysarum mackenzii Richards.
Uromyces hedysari-obscuri
Hedysarum sulphurascens Rydb.
Uromyces hedysari-obscuri
Helianthus annuus L., cult.
Puccinia helianthi
Helianthus aridus Rydb.
Puccinia helianthi
Helianthus fascicularis Greene
Puccinia helianthi
Helianthus giganteus L.
Puccinia helianthi
Helianthus petiolaris Nutt.
Puccinia helianthi
Uromyces junci
Helianthus rigidus (Cass.) Desf.
Puccinia helianthi
Helianthus strumosus L.
Puccinia helianthi
Helianthus subrhomboideus Rydb.
Puccinia helianthi
Uromyces junci
Helianthus subtuberosus Bourg.
Puccinia helianthi
Uromyces junci
Helianthus tuberosus L.
Puccinia helianthi
Uromyces junci
Hepatica acutiloba DC.
Tranzschelia pruni-spinosae
Heuchera cylindrica Dougl. var. glabella (T. & G.) Wheelock
Puccinia heucherae var. heucherae
Heuchera cylindrica var. trionalis R. B. & L.
Puccinia heucherae var. saxifragae
Heuchera glabra Willd.
Puccinia heucherae var. heucherae
Heuchera micrantha Dougl. ex Lindl.
Puccinia heucherae var. heucherae
Heuchera ovalifolia Nutt.
Puccinia heucherae var. heucherae
P. heucherae var. saxifragae
Heuchera richardsonii R. Br.
Puccinia heucherae var. saxifragae
Hieracium albiflorum Hook.
Aecidium columbiense
Hieracium canadense Michx.
Puccinia hieracii
Hieracium scabriusculum Schw.
Puccinia extensicola var. hieraciata
P. hieracii
Hieracium scabrum Michx.
Puccinia fraseri
P. hieracii
Hierochloë odorata (L.) Wahl.
Puccinia coronata
Holcus lanatus L.
Puccinia coronata
P. rubigo-vera var. agropyri
Honkenya peploides (L.) Ehrh.
Puccinia arenariae
Hordeum caespitosum Scribn.
Puccinia glumarum
Hordeum jubatum L.
Puccinia glumarum
P. graminis
P. montanensis
P. rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
P. rubigo-vera var. impatientis
Hordeum murinum L., cult.
Puccinia graminis
Hordeum vulgare L., cult.
Puccinia graminis
P. hordei (P. anomala)
P. glumarum
Houstonia longifolia Gaertn.
Uromyces houstoniatus
Hypericum kalmianum L.
Uromyces hyperici
Hypericum perforatum L.
Uromyces hyperici
Hypericum prolificum L.
Uromyces hyperici
Hypericum virginicum L. (Triadenum v. (L.) Raf.)
Uromyces hyperici
U. sparganii
Hystrix patula Moench
Puccinia rubigo-vera var. agropyrina

Impatiens balsamina L.
Cronartium flaccidum
Impatiens biflora Walt.
Puccinia argentata
P. rubigo-vera var. impatientis
Impatiens noli-tangere L.
Puccinia argentata

Impatiens pallida Nutt.
Puccinia argentata
P. rubigo-vera var. impatientis
Iris versicolor L.
Puccinia iridis
P. sessilis
Iris sp.
Puccinia iridis
Iva axillaris Pursh
Puccinia intermixta

Juncus ater Rydb.
Uromyces junci
Juncus balticus Willd.
Uromyces junci
U. junci-effusi
Juncus longistylis Torr.
Uromyces silphii
Juncus tenuis Willd.
Uromyces silphii
Juncus xiphioides E. Mey.
Uromyces junci-effusi
Juniperus communis L.
Gymnosporangium clavipes
G. clavariaeforme
Juniperus fragrans (cult.)
Gymnosporangium globosum
Juniperus horizontalis Moench
Gymnosporangium corniculans
G. juvenescens
G. globosum
G. clavipes
Juniperus scopulorum Sarg.
Gymnosporangium nelsoni
G. betheli
Juniperus sibirica Burgsd.
Gymnosporangium clavipes
G. juniperinum
Juniperus virginiana L.
Gymnosporangium clavipes
G. globosum
G. nidus-avis
G. juniperi-virginianae
G. corniculans
Juniperus spp.
Gymnosporangium clavipes
G. globosum

Koeleria cristata (L.) Pers.
Puccinia koeleriae
P. monoica

Lactuca pulchella (Pursh) DC.
Puccinia extensicola var. hieraciata
P. minussensis
Lactuca sativa L., cult.
Puccinia extensicola var. hieraciata
Lamarkia aurea (L.) Moench
(Achyrodes a Ktze.)
Puccinia coronata
Lappula echinata Gilib.
Puccinia aristidae

Lapsana communis L.
Puccinia lapsanae
Larix laricina (DuRoi) Koch
Melampsora bigelowii
M. medusae
Larix lyallii Parl.
Melampsora bigelowii
Lathyrus myrtifolius Muhl.
Uromyces fabae
Lathyrus ochroleucus Hook.
Uromyces fabae
Lathyrus venosus Muhl.
Uromyces fabae
Ledum glandulosum Nutt.
Chrysomyxa ledi var. glandulosi
Ledum groenlandicum Oeder
Chrysomyxa ledi var. groenlandici
C. ledicola
C. woronini
Ledum palustre L. var. decumbens Ait
Chrysomyxa ledi var. ledi
C. ledicola
C. woronini
Lespedeza capitata Michx.
Uromyces lespedezae-procumbentis
Lewisia rediviva Pursh
Uromyces spragueae
Liatris aspera (Michx.) Greene
Puccinia liatridis
Liatris ligulistylis (A. Nels.) Rydb.
Puccinia liatridis
Liatris punctata Hook.
Puccinia liatridis
Ligusticum apiifolium (Nutt.) Gray
Puccinia ligustici
Ligusticum scothicum L.
Aecidium ligustici
Lilium canadense L.
Uromyces holwayi
Lilium columbianum Hanson
Uromyces holwayi
Lilium michiganense Farwell
Uromyces holwayi
Lilium umbellatum Pursh
Puccinia sporoboli
Limonium latifolium
Uromyces limonii
Limonium nashii Small (not L. carolinianum
(Walt.) Britt.)
Uromyces limonii-caroliniani
Limonium vulgare
Uromyces limonii
Linum lewisii Pursh
Melampsora lini
Linum rigidum Pursh
Melampsora lini
Linum usitatissimum L., cult.
Melampsora lini
Lobelia syphilitica L.
Puccinia lobeliae
Lolium multiflorum Lam.
Puccinia graminis

Lolium perenne L.
Puccinia graminis
Lonicera caerulea L.
Puccinia festucae
Lupinus perennis L.
Puccinia andropogonis var. onobrychidis
Lupinus sp.
Uromyces lupini
Luzula campestris (L.) DC. var. multiflora (Ehrh.) Celak.
Puccinia obscura
Luzula carolinae Wats.
Puccinia obscura
Luzula parviflora (Ehrh.) Desv.
Puccinia obscura
Lycopus americanus Muhl.
Puccinia angustata
Lycopus asper Greene
Puccinia angustata
Lycopus rubellus Moench
Puccinia angustata
Lycopus uniflorus Michx.
Puccinia angustata
Lycopus virginicus L.
Puccinia angustata
Lygodesmia juncea (Pursh) D. Don
Puccinia extensicola var. hieraciata
P. grindeliae
P. stipae
Lysimachia thyrsiflora L.
Puccinia limosae

Madia sativa Molina
Coleosporium madiae
Mahonia aquifolium (Pursh) Nutt.
Puccinia koeleriae
Mahonia repens (Lindl.) Don
Puccinia koeleriae
Mahonia sp.
Puccinia graminis
Cumminsiella sanguinea
Maianthemum canadense Desf.
Puccinia amphigena
P. sessilis
Uromyces acuminatus var. magnatus
Malus coronaria (L.) Mill.
Gymnosporangium juniperi-virginianae
Malus pumila Mill.
Gymnosporangium clavipes
G. globosum
G. juniperi-virginianae
Malus rivularis (Doug.) Roem.
Gymnosporangium nootkatense
Malus sylvestris (L.) Mill.
Gymnosporangium juniperi-virginianae
Malva moschata L.
Puccinia malvacearum
Malva rotundifolia L.
Pucinia malvacearum
Malva spp.
Puccinia malvacearum
Medicago lupulina L.
Uromyces striatus
Medicago sativa L.
Uromyces striatus
Melampyrum lineare Lam.
Puccinia adropogonis var. melampyri
Mentha arvensis L.
Puccinia angustata
P. menthae
Mentha canadensis L.
Puccinia angustata
P. menthae
Mentha glabrior (Hook.) Rydb.
Puccinia angustata
P. menthae
Mentha piperita L.
Puccinia menthae
Mentha spicata L.
Puccinia menthae
Merckia physodes Fisch.
Puccinia arenariae
Micranthes lyallii (Engler) Small
Puccinia heucherae var. heucherae
Milium effusum L.
Puccinia graminis
Mitella breweri Gray
Puccinia heucherae var. austroberingiana
Mitella diphylla L.
Puccinia heucherae var. heucherae
Mitella nuda L.
Aecidium mitellae
Puccinia heucherae var. heucherae
Mitella ovalis Greene
Puccinia heucherae var. heucherae
Mitella trifida Graham
Puccinia heucherae var. austroberingiana
Moehringia lateriflora (L.) Fenzl
Puccinia arenariae
Uromyces acuminatus var. spartinae
Monarda didyma L.
Puccinia menthae
Monarda fistulosa L.
Puccinia menthae
Monarda menthaefolia Benth.
Puccinia menthae
Monarda mollis L.
Puccinia menthae
Monarda mollis var. menthaefolia Fern
Puccinia menthae
Moneses uniflora (L.) Gray
Chrysomyxa monesis
C. pirolata
Pucciniastrum pyrolae
Muhlenbergia cuspidata (Torr.) Rydb.
Puccinia schedonnardi
Muricauda dracontium (L.) Small
Uromyces caladii
Myrica gale L.
Cronartium comptoniae

Nabalus albus (L.) Hook.
Puccinia extensicola var. hieraciata
Nabalus altissimus (L.) Hook.
Puccinia orbicula

Nabalus racemosus (Michx.) DC.
Puccinia maculosa
P. orbicula
Nabalus trifoliolatus Cass.
Puccinia orbicula
Nabalus sp.
Puccinia orbicula
Naumburgia thyrsiflora (L.) Duby
Puccinia limosae
Nemexia herbacea (L.) Small
Puccinia amphigena
Nemexia lasioneuron (Hook.) Rydb.
Puccinia amphigena

Oenothera biennis L.
Puccinia extensicola var. oenotherae
Onoclea sensibilis L.
Uredinopsis mirabilis
Onopordum acanthium L.
Puccinia onopordi
Onosmodium occidentale Mackenzie
Puccinia rubigo-vera var. apocrypta
Oryzopsis asperifolia Michx.
Puccinia pygmaea
Osmorrhiza claytoni (Michx.) Clarke
Puccinia pimpinellae
Osmorrhiza longistylis (Torr.) DC.
Puccinia pimpinellae
Osmunda claytoniana L.
Uredinopsis osmundae
Osmunda spectabilis Willd.
Uredinopsis osmundae
Oxyria digyna (L.) Hill.
Puccinia oxyriae
Oxytropis gracilis (A. Nels.) K. Schum.
Uromyces punctatus

Padus nana (DuRoi) Roem.
Tranzschelia pruni-spinosae
Panicum capillare L.
Puccinia emaculata
Parnassia fimbriata Banks
Puccinia parnassiae
Parnassia palustris L.
Puccinia uliginosa
Pentstemon acuminatus Dougl.
Puccinia andropogonis var. pentstemonis
Pentstemon albidus Nutt.
Puccinia andropogonis var. pentstemonis
Pentstemon eriantherus Pursh
Puccinia andropogonis var. pentstemonis
Pentstemon nitidus Dougl.
Puccinia andropogonis var. pentstemonis
Petalostemon candidus (Willd.) Michx.
Puccinia andropogonis var. onobrychidis
Petalostemon oligophyllus (Torr.) Rydb.
Uropyxis petalostemonis
Petalostemon purpureus (Vent.) Rydb.
Puccinia andropogonis var. onobrychidis
Petasites frigidus (L.) Fries
Puccinia conglomerata
Petasites palmatus (Ait.) A. Gray
Puccinia conglomerata

Phaca frigida L.
Uromyces lapponicus
Phacelia franklinii (R. Br.) Gray
Puccinia rubigo-vera var. apocrypta
Phacelia heterophylla Pursh
Puccinia rubigo-vera var. apocrypta
Phalaris arundinacea L.
Puccinia sessilis
Phalaris canariensis L.
Puccinia graminis
Phaseolus vulgaris L.
Uromyces phaseoli
Phegopteris dryopteris (L.) Fée
Uredinopsis phegopteridis
Hyalopsora aspidiotus
Phleum pratense L.
Puccinia graminis var. phlei-pratensis
Phlox hoodii Richards.-
Puccinia douglasii
Phlox sp.
Uromyces acuminatus var. polemonii
Phragmites communis Trin.
Puccinia magnusiana
P. phragmitis
Physalis heterophylla Nees
Puccinia physalidis
Physalis virginiana Mill.
Puccinia physalidis
Picea engelmanni (Parry) Engelm.
Chrysomyxa empetri
C. ledicola
C. weirii
Melampsorella cerastii
Picea excelsa (Lam.) Link
Melampsorella cerastii
Picea glauca (Moench) Voss (P. canadensis (Mill.) B.S.P.)
Chrysomyxa chiogenis
C. empetri
C. ledi var. cassandrae
C. ledicola
C. pirolata
Melampsorella cerastii
Pucciniastrum arcticum
P. americanum
Picea glauca var. albertiana (S. Brown) Sarg. (P. albertiana S. Brown.)
Chrysomyxa ledicola
C. pirolata
Melampsorella cerastii
Picea mariana (Mill.) B.S.P.
Chrysomyxa chiogenis
C. empetri
C. ledi
C. ledi var. groenlandici
C. ledicola
C. pirolata
C. woronini
Melampsorella cerastii
Picea pungens Engelm.
Chrysomyxa ledi
C. ledicola

Picea rubens Sarg.
Chrysomyxa empetri
C. ledi
C. ledi var. cassandrae
C. ledi var. groenlandica
C. ledicola
C. weirii
Picea sitchensis (Bong.) Carr.
Chrysomyxa ledicola
C. monesis
C. weiri
Picea sp.
Chrysomyxa weirii
Pinus banksiana Lamb.
Coleosporium solidaginis
Cronartium comandrae
C. comptoniae
Pinus contorta Dougl.
Coleosporium solidaginis
Cronartium coleosporioides
C. comandrae
Pinus ponderosa Dougl.
Cronartium coleosporioides
C. comandrae
Pinus spp.
Cronartium comandrae
C. ribicola
Pisum sativum L.
Uromyces fabae
Plantago eriopoda Torr.
Puccinia aristidae
Uromyces peckianus
Pleurogyne rotata Griesb.
Uromyces gentianae
Poa annua L.
Puccinia poae-nemoralis
Poa arida Vasey
Puccinia rubigo-vera var. agropyri
Poa compressa L.
Puccinia graminis
P. poae-nemoralis
Poa crocata Michx.
Puccinia poae-nemoralis
Uromyces dactylidis
Poa interior Rydb.
Puccinia poae-nemoralis
Poa nemoralis L.
Puccinia poae-nemoralis
Poa palustris L.
Puccinia poae-nemoralis
Poa pratensis L.
Puccinia poae-nemoralis
Uromyces dactylidis
Poa sandbergii Vasey
Puccinia rubigo-vera var. agropyri
Poa trivialis L.
Uromyces dactylidis
Poa spp.
Puccinia graminis var. poae
P. poae-nemoralis
Podophyllum peltatum L.
Puccinia podophylli
Polygala paucifolia Willd.
Puccinia pyrolae
Polygala senega L.
Puccinia andropogonis var. polygalina
Polygonum aviculare L.
Uromyces polygoni
Polygonum buxiforme Small
Uromyces polygoni
Polygonum coccineum (Muhl.) Pers.
Puccinia polygoni-amphibii var. persicariae
Polygonum convolvulus L.
Puccinia polygoni-amphibii var. convolvuli
Polygonum erectum L.
Puccinia aristidae
Uromyces polygoni
Polygonum fowleri Rob.
Uromyces polygoni
Polygonum harwrightii Gray
Puccinia polygoni-amphibii var. persicariae
Polygonum hydropiperoides (Michx.) Small
Puccinia polygoni-amphibii var. persicariae
Polygonum lapathifolium L.
Puccinia polygoni-amphibii var. persicariae
Polygonum muhlenbergii (Meisn.) Wats.
Puccinia polygoni-amphibii var. persicariae
Polygonum neglectum Besser
Puccinia aristidae
Polygonum pensylvanicum L.
Puccinia polygoni-amphibii var. persicariae
Polygonum persicaria L.
Puccinia polygoni-amphibii var. persicariae
Polygonum ramosissimum Michx.
Uromyces polygoni
Polygonum rubescens Small
Uromyces polygoni
Polygonum spergulariaeforme Meissn.
Uromyces polygoni
Polypodium virginianum L.
Milesia polypodophila
Populus acuminata Rydb.
Melampsora occidentalis
Populus balsamifera L. (P. tacamahacca Mill.)
Melampsora medusae
M. occidentalis
Populus deltoides Marsh.
Melampsora medusae
Populus grandidentata Michx.
Melampsora abietis-canadensis
Populus sargentii Dode
Melampsora medusae
Populus termuloides Michx.
Melampsora abietis-canadensis
M. albertensis
M. medusae

Populus trichocarpa T. & G.
Melampsora occidentalis
Populus spp.
Melampsora medusae
Potentilla bipinnatifida Dougl.
Phragmidium ivesiae
P. potentillae
Potentilla canadensis L.
Frommea obtusa
Potentilla concinna Richards.
Phragmidium ivesiae
Potentilla diversifolia Lehm.
Phragmidium ivesiae
Potentilla flabelliformis Lehm.
Phragmidium ivesiae
Potentilla fruticosa L.
Phragmidium andersoni
Potentilla glabrella Rydb.
Phragmidium potentillae
Potentilla glaucophylla Lehm.
Phragmidium ivesiae
Potentilla glomerata Nels.
Phragmidium ivesiae
Potentilla hippiana Lehm.
Phragmidium potentillae
P. ivesiae
Potentilla nuttallii Lehm.
Phragmidium ivesiae
Potentilla pectinata Raf.
Phragmidium potentillae
Potentilla pennsylvanica L.
Phragmidium potentillae
Potentilla strigosa Pall.
Phragmidium potentillae
Potentilla tridentata Ait. (Sibbaldiopsis t.)
Pucciniastrum potentillae
Potentilla spp.
Phragmidium invesiae
P. potentillae
Prenanthes, see Nabalus
Prunus domestica L.
Tranzschelia pruni-spinosae
Pseudotsuga taxifolia (Poir.) Britt. (P. mucronata (Raf.) Sudw.)
Melampsora albertensis
M. occidentalis
Psilactis asteroides Gray
Puccinia asteris
Psoralea argophylla Pursh
Uromyces psoraleae var. argophyllae
Psoralea lanceolata Pursh
Uromyces psoraleae var. psoraleae
Psoralea physodes Dougl.
Uromyces abbreviatus
Pteridium aquilinum pubescens Underw.
Uredinopsis macrosperma
Pteretis nodulosa (Michx.) Nieuwl.
Uredinopsis struthiopteridis
Puccinellia maritima (Huds.) Parl.
Puccinia rubigo-vera var. agropyrina
Puccinellia nuttalliana (Schult.) Hitchc.
Puccinia rubigo-vera var. agropyri
Puccinellia tenuiflora (Griesb.) Scribn. & Merr.
Puccinia rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
Pulsatilla ludoviciana (Nutt.) Heller
Tranzschelia suffusca
Puccinia pulsatillae
Pycnanthemum flexuosum (Walt.) B.S.P.
Puccinia menthae
Pycnanthemum virginianum (L.) Dur. & Jacks.
Puccinia menthae
Pyrola americana Sweet
Chrysomyxa pirolata
Pyrola asarifolia Michx.
Chrysomyxa pirolata
Pucciniastrum pyrolae
Pyrola bracteata Hook.
Chrysomyxa pirolata
Pyrola chlorantha Sw. (P. virens Schweigg.)
Chrysomyxa pirolata
Pucciniastrum pyrolae
Pyrola elliptica Nutt.
Chrysomyxa pirolata
Pucciniastrum pyrolae
Pyrola grandifolia Radius
Chrysomyxa pirolata
Pyrola minor L.
Chrysomyxa pirolata
Pyrola picta Smith
Chrysomyxa pirolata
Pyrola rotundifolia Michx.
Pucciniastrum pyrolae
Pyrola secunda L.
Chrysomyxa pirolata
Pucciniastrum pyrolae
Pyrola uliginosa T. & G.
Chrysomyxa pirolata
Pyrus communis L.
Gymnosporangium clavariaeforme
Pyrus sp.
Gymnosporangium clavipes

Ranunculus abortivus L.
Puccinia eatoniae var. ranunculi
Ranunculus acris L.
Puccinia rubigo-vera var. agropyrina
Ranunculus affinis R.Br.
Puccinia rubigo-vera var. agropyrina
Ranunculus cariophyllus Hook.
Puccinia rubigo-vera var. agropyrina
Ranunculus cymbalaria Pursh
Puccinia rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
Ranunculus macounii Britt.
Uromyces alopecuri
Ranunculus micranthus Nutt.
Uromyces alopecuri
Ranunculus recurvatus Poir.
Tranzschelia pruni-spinosae
Ranunculus repens L.
Uromyces dactylidis
Ranunculus sceleratus L.
Uromyces alopecuri

Ranunculus suksdorfii Gray
Puccinia ranunculi
Rhamnus alnifolia L'Her.
Puccinia coronata var. calamagrostis
Rhamnus cathartica L.
Puccinia coronata var. avenae
Rhamnus davurica Pall.
Puccinia coronata
Rhamnus frangula L.
Puccinia coronata var. agrostis
Rhamnus purshiana DC.
Puccinia coronata
Rhamnus utilis Decne.
Puccinia coronata
Rheum rhaponticum L.
Puccinia phragmites
Rhododendron lapponicum (L.) Wahl.
Chrysomyxa ledi var. rhododendri
Rhodora canadensis (L.) Carr.
Pucciniastrum myrtilli
Rhus aromatica Ait.
Pileolaria toxicodendri
Rhus radicans L.
Pileolaria toxicodendri
Rhus toxicodendron auct.
Pileolaria toxicodendri
Rhynchospora alba (L.) Vahl
Uromyces rhyncosporae
Ribes americanum Mill.
Puccinia caricis var. grossulariata
Ribes bracteosum Dougl.
Cronartium ribicola
Puccinia caricis var. grossulariata
Ribes echinatum Lindl.
Cronartium ribicola
Melampsora ribesii-purpureae
Puccinia parkerae
Ribes glandulosum Gauer
Puccinia caricis var. grossulariata
Ribes grossularia L.
Cronartium ribicola
Puccinia caricis var. grossulariata
Ribes hudsonianum Richards.
Puccinia caricis var. grossulariata
Ribes lacustre (Pers.) Poir.
Puccinia caricis var. grossulariata
P. parkerae
Ribes laxiflorum Pursh
Puccinia caricis var. grossulariata
Ribes nigrum L.
Cronartium ribicola
Puccinia caricis var. grossulariata
Ribes setosum Lindley
Puccinia caricis var. grossulariata
Ribes triste Pallas
Puccinia ribis
Ribes spp.
Cronartium ribicola
Puccinia caricis var. grossulariata
Rosa acicularis Lindl.
Phragmidium rosae-acicularis
Rosa blanda Ait.
Phragmidium americanum
P. montivagum
P. speciosum
Rosa bourgeauiana Crépin
Phragmidium montivagum
P. rosae-acicularis
Rosa californica C. & S.
Phragmidium rosae-californicae
Rosa gymnocarpa Nutt.
Phragmidium rosae-californicae
Rosa macounii Greene
Phragmidium speciosum
Rosa nutkana Presl
Phragmidium rosae-acicularis
P. rosae-californicae
Rosa pisocarpa Gray
Phragmidium rosae-californicae
Rosa suffulta Greene
Phragmidium rosicola
P. rosae-acicularis
P. rosae-arkansanae
Rosa virginiana Mill.
Phragmidium americanum
P. speciosum
Rosa spp.
Phragmidium americanum
P. disciflorum
P. rosae-pimpinellifoliae
P. rosae-arkansanae
P. rosae-acicularis
P. rosae-californicae
P. rosicola
P. speciosum
P. subcorticinum
P. montivagum
Rubus acaulis Michx.
Gymnoconia peckiana
Pucciniastrum arcticum
Rubus arcticus L.
Gymnoconia peckiana
Pucciniastrum arcticum
Rubus idaeus L. var. strigosus Maxim.
Phragmidium rubi-idaei
Rubus leucodermis Dougl.
Phragmidium rubi-idaei
Rubus melanolasius Focke
Pucciniastrum americanum
Phragmidium rubi-idaei
Rubus nigrobaccus Bailey
Gymnoconia peckiana
Rubus occidentalis L.
Phragmidium rubi-idaei
Rubus odoratus L.
Phragmidium rubi-odorati
Rubus parviflorus Nutt.
Phragmidium occidentale
Rubus procumbens Muhl.
Kuenhneola uredinis
Rubus pubescens Raf.
Kuehneola uredinis
Pucciniastrum arcticum

Rubus randii (Bailey) Rydb.
Gymnoconia peckiana
Rubus strigosus Michx.
Phragmidium rubi-idaei
Pucciniastrum americanum
Rubus triflorus Richards.
Gymnoconia peckiana
Puccinastrum arcticum
Rubus spp.
Gymnoconia peckiana
Phragmidium rubi-idaei
Pucciniastrum americanum
P. arcticum
Rudbeckia ampla A. Nels.
Uromyces perigynius
Rudbeckia laciniata L.
Uromyces perigynius
U. rudbeckiae
Rumex britannica L.
Puccinia ornata
Rumex mexicanus Meisn.
Puccinia phragmitis
Rumex occidentalis S. Wats.
Puccinia ornata
P. phragmitis
Rumex sp.
Puccinia ornata

Salicornia herbacea L.
Uromyces peckianus
Salicornia pacifica Standl.
Uromyces peckianus
Salix alba L. var. vitellina L.
Melampsora abieti-capraearum
Salix amygdaloides Anders.
Melampsora bigelowii
Salix anglorum Cham.
Melampsora arctica
Salix arbusculoides Anders.
Melanpsora arctica
Salix balsamifera (Hook.) Barratt
Melampsora arctica
Salix bebbiana Sarg.
Melampsora abieti-capraearum
M. ribesii-purpurea
Salix candida Flugge
Melampsora abieti-capraearum
Salix cordata Muhl.
Melampsora abieti-capraearum
Salix glaucops Anders.
Melampsora arctica
Salix myrtillifolia Anders.
Melampsora arctica
Salix petrophila Rydb.
Melampsora arctica
Salix purpurea L. var. gracilis Anders.
Melampsora abieti-capraearum
Salix rubra Richards.
Melampsora abieti-capraearum
Salix spp.
Melampsora bigelowii
M. arctica

Sanicula marilandica L.
Puccinia marylandica
Sanicula sp.
Puccinia marylandica
Sarcobatus vermiculatus (Hook.) Torr.
Puccinia aristidae
Saxifraga aizoides L.
Puccinia pazschkei var. jueliana
Saxifraga bronchialis L.
Puccinia pazschkei var. tricuspidatae
Saxifraga cernua L.
Puccinia heucherae var. saxifragae
Saxifraga ferruginea Graham
Puccinia pazschkei var. jueliana
Saxifraga hieracifolia Waldst. & Kit.
Puccinia heucherae var. saxifragae
Saxifraga lyallii Engler (Micranthes l. (Engler) Small
Puccinia heucherae var. heucherae
Saxifraga mertensiana Bong.
Puccinia pazschkei var. heterisiae
Saxifraga nivalis L.
Puccinia heucherae var. saxifragae
Saxifraga occidentalis S. Wats. ssp. rufidulus (Small) Basigalupi
Puccinia heucherae var. saxifragae
Saxifraga oppositifolia L.
Puccinia fischeri
P. pazschkei var. oppositifoliae
Saxifraga punctata sspp.
Puccinia heucherae var. austroberingiana
Saxifraga rivularis L.
Puccinia heucherae var. saxifragae
Saxifraga tenuis (Wallr.) Sm.
Puccinia heucherae var. saxifragae
Saxifraga tricuspidata Rottb. (Leptasea t. (Rottb.) Haw.)
Puccinia pazschkei var. tricuspidatae
Saxifraga virginiensis Michx.
Puccinia heucherae var. saxifragae
Scirpus atrovirens Muhl.
Puccinia angustata
Scirpus cyperinus (L.) Kunth
Puccinia angustata
Scirpus fluviatilis (Torr.) Gray
Uromyces scirpi
Scirpus microcarpus Presl
Puccinia angustata
P. mcclatchieana
Scirpus paludosus A.Nels.
Uromyces scirpi
Scirpus validus Vahl
Puccinia obtecta
Uromyces scirpi
Scolochloa festucacea (Willd.) Link
Puccinia coronata
Sedum stenopetalum Pursh
Puccinia rydbergii
Secale cereale L.
Puccinia graminis
P. rubigo-vera var. secalis
Sempervivum tectorum L.
Endophyllum sempervivi

Senecio columbianus Greene
Puccinia extensicola var. hieraciata
Senecio flavulus Greene
Puccinia extensicola var. hieraciata
Senecio triangularis Hook.
Puccinia angustata
P. subcircinata
Senecio willingii Greenm.
Puccinia recedens
Shepherdia argentea Nutt.
Puccinia caricis-shepherdiae
Shepherdia canadensis (L.) Nutt.
Puccinia caricis-shepherdiae
P. coronata
Sibbaldiopsis tridentata (Sol.) Rydb.
Pucciniastrum potentillae
Sideranthus spinulosus (Pursh) Sweet
Puccinia grindeliae
Sisymbrium altissimum L.
Puccinia aristidae
Sium cicutaefolium Schrank
Uromyces scirpi
Smilacina stellata (L.) Desf.
Puccinia amphigena
P. sessilis
Uromyces acuminatus var. magnatus
Smilax herbacea L.
Puccinia amphigena
Solidago canadensis L.
Coleosporium solidaginis
Solidago gilvocanescens (Rydb.) Smyth
Coleosporium solidaginis
Solidago glaberrima Mart.
Puccinia stipae
Solidago glabrum Mart.
Coleosporium solidaginis
Solidago mollis Bartl.
Puccinia stipae
Solidago multiradiata Ait.
Coleosporium solidaginis
Solidago nemoralis Ait.
Puccinia extensicola var. solidaginis
Solidago patula Muhl.
Coleosporium solidaginis
Solidago puberula Nutt.
Puccinia virgaureae
Solidago rigida L.
Puccinia extensicola var. solidaginis
P. stipae
Solidago serotina Ait.
Coleosporium solidaginis
Puccinia extensicola var. solidaginis
Solidago uliginosa Nutt.
Coleosporium solidaginis
Solidago sp.
Puccinia stipae
Sorbus americana Marsh.
Gymnosporangium aurantiacum (G. cornutum)
Sorbus occidentalis (Wats.) Greene
Gymnosporangium nootkatense
G. juniperinum (G. tremelloides)
Sorbus scopulina Greene
Gymnosporangium aurantiacum (G. cornutum)
G. juniperinum (G. tremelloides)
Sorbus sitchensis Roem.
Gymnosporangium juniperinum (G. tremelloides)
Sparganium eurycarpum Engelm.
Uromyces sparganii
Spartina alterniflora Loisel.
Uromyces acuminatus
Spartina gracilis Trin.
Puccinia distichlidis
Uromyces acuminatus
Spartina pectinata Link (S. michauxiana Hitchc.)
Puccinia distichlidis
P. seymouriana
P. sparganioides
Uromyces acuminatus
Spartina spp.
Puccinia distichlidis
Spergularia canadensis (Pers.) D. Don
Uromyces acuminatus var. spartinae
Sphaeralcea coccinea (Nutt.) Rydb.
Puccinia sherardiana
Sphenopholis obtusata (Michx.) Scribn.
Puccinia eatoniae
Sphenopholis pallens (Spreng.) Scribn.
Puccinia eatoniae
Spinacia oleracea L.
Puccinia aristidae
Sporobolus cryptandrus (Torr.) Gray
Puccinia graminis
Steironema ciliatum (L.) Raf.
Puccinia dayi
P. distichlidis
Stellaria graminea L.
Melampsorella cerastii
Stellaria longifolia Muhl.
Puccinia arenariae
Stellaria longipes Goldie
Puccinia arenariae
Melampsorella cerastii
Stipa comata Trin. & Rupr.
Puccinia stipae
Stipa spartea Trin.
Puccinia stipae
Stipa tweedyi Scribn. & Vasey
Puccinia stipae
Stipa viridula Trin.
Puccinia scaber
Suaeda maritima (L.) Dumort
Uromyces peckianus
Symphoricarpos albus (L.) Blake
Puccinia crandallii
P. symphoricarpi
Symphoricarpos occidentalis Hook.
Puccinia crandallii
Symphoricarpos spp.
Puccinia crandallii

Taraxacum dumetorum Greene
Puccinia hieracii
Taraxacum kok-saghyz Rod.
Puccinia hieracii
Taraxacum vulgare (Lam.) Schr.
Puccinia hieracii
P. variabilis
Tellima grandiflora (Pursh) Dougl.
Puccinia heucherae var. austroberingiana
Thalictrum alpinum L.
Puccinia rubigo-vera var. agropyri
Thalictrum dasycarpum Fisch. & Lall.
Puccinia rubigo-vera var. agropyrina
Tranzschelia thalictri
Thalictrum dioicum L.
Puccinia rubigo-vera var. agropyri
Thalictrum polygamum Muhl.
Tranzschelia thalictri
Thalictrum venulosum Trel.
Puccinia rubigo-vera var. agropyri
P. rubigo-vera var. agropyrina
Tranzschelia thalictri
Thalictrum sp.
Tranzschelia thalictri
Thlaspi arvense L.
Puccinia aristidae
Tiarella cordifolia L.
Puccinia heucherae var. heucherae
Tiarella unifoliata Hook.
Puccinia heucherae var. heucherae
Tolmiea menziesii (Pursh) T. & G.
Puccinia heucherae var. heucherae
Trautvetteria grandis Nutt.
Puccinia pulsatillae
Trientalis americana Pursh
Puccinia karelica
Trifolium dubium Sibth.
Uromyces minor
Trifolium hybridum L.
Uromyces nerviphilus
U. trifolii var. hybridi
Trifolium incarnatum L.
Uromyces trifolii var. trifolii-repentis
Trifolium medium L.
Uromyces trifolii var. fallens
Trifolium microdon H. & A.
Uromyces minor
Trifolium oliganthum Steud.
Uromyces minor
Trifolium pratense L.
Uromyces trifolii var. fallens
U. nerviphilus
Trifolium repens L.
Uromyces nerviphilus
U. trifolii var. trifolii-repentis
Triglochin maritima L.
Puccinia aristidae
Triodia flava (L.) Smyth
Puccinia windsoriae
Trisetum spicatum (L.) Ricker
Puccinia monoica

Triticum aestivum L.
Puccinia glumarum
P. graminis
P. rubigo-vera var. tritici
Triticum dicoccum Schrank.
Puccinia graminis
Triticum durum Desf.
Puccinia graminis
P. rubigo-vera var. tritici
Triticum spelta L.
Puccinia rubigo-vera var. tritici
Tsuga canadensis (L.) Carr.
Melampsora abietis-canadensis
M. farlowii
Pucciniastrum myrtilli
Tsuga heterophylla (Raf.) Sarg.
Uraecium holwayi
Tsuga mertensiana (Bong.) Carr.
Uraecium holwayi
Tussilago farfara L.
Puccinia poarum

Urtica dioica L.
Puccinia caricis var. urticata
Urtica gracilis Ait.
Puccinia caricis var. urticata
Urtica lyallii Wats.
Puccinia caricis var. urticata

Vaccinium corymbosum L.
Pucciniastrum myrtilli
Vaccinium myrtillus L.
Pucciniastrum myrtilli
P. goeppertianum
Vaccinium oreophilum Rydb.
Puccinisatrum goeppertianum
Vaccinium parvifolium Smith
Chrysomyxa ledi var. vaccinii
Vaccinium pennsylvanicum Lam.
Pucciniastrum myrtilli
P. goeppertianum
Vaccinium vitis-idaea L.
Pucciniastrum goeppertianum
Vaccinium spp.
Pucciniastrum goeppertianum
Valeriana septentrionalis Rydb.
Puccinia commutata
Valeriana sitchensis Bong.
Puccinia commutata
Veratrum californicum Durand
Puccinia veratri
Veratrum eschscholtzianum (R. & S.) Rydb.
Puccinia veratri
Veronica alpina L. var. unalaschcensis C. & S.
(V. wormskjoldii R. & S.)
Puccinia albulensis
Viburnum cassinoides L.
Coleosporium viburni
Viburnum lentago L.
Coleosporium viburni
Viburnum pauciflorum Pylaie
Puccinia linkii

Vicia americana Muhl.
Uromyces coloradensis var. campester
U. coloradensis var. maritimus
U. fabae
Vicia angustifolia Reichard
Uromyces fabae
Vicia cracca L.
Uromyces coloradensis var. campester
U. fabae
Vicia oregana Nutt.
Uromyces coloradensis var. campester
Vicia sativa L.
Uromyces fabae
Vicia sparsifolia Nutt.
Uromyces coloradensis var. campester
U. fabae
Vinca major L.
Puccinia vincae
Viola adunca Smith
Puccinia violae
Viola canadensis L.
Puccinia violae
P. ornatula
Viola conspersa Reichenb.
Puccinia viola
Viola eriocarpa Schw.
Puccinia violae
Viola glabella Nutt.
Puccinia ornatula
Viola langsdorfii Fisch.
Puccinia fergussoni
Viola mackloskeyi Lloyd
Puccinia fergussoni
Viola nephrophylla Greene
Puccinia ellisiana
P. fergussoni
P. violae
Viola odorata L.
Puccinia violae
Viola orbiculata Geyer
Puccinia canadensis
Viola pedatifida G. Don.
Puccinia violae
Viola pubescens Ait.
Puccinia violae
Viola renifolia Gray
Puccinia violae
Violae rugulosa Greene
Puccinia ornatula
Viola septentrionalis Greene
Puccinia violae
Viola sororia Willd.
Puccinia violae
Violae tricolor L.
Puccinia violae
Viola spp.
Puccinia ellisiana
P. violae

Waldsteinia fragarioides (Michx.) Tratt.
Puccinia waldsteiniae

Xanthium commune Britt.
Puccinia xanthii
Xanthium chinense Mill.
Puccinia xanthii

Zea mays L.
Puccinia sorghi
Zizia aurea (L.) Koch
Puccinia angelicae
Zizia cordata (Walt.) Koch
Puccinia ziziae
Zygadenus chloranthus Richards.
Puccinia atropuncta
Zygadenus elegans Pursh
Puccinia grumosa
Zygadenus gramineus Rydb.
Uromyces zygadeni

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